



GESTRA® Steam Traps · Product Range Group A1

MK 45-1
MK 45-2

Thermostatic Steam Traps

MK 45-1 and MK 45-2

PN 40, DN 15, 20, 25 (1/2", 3/4", 1")

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				
Max. service pressure	[bar g] [psig]	32 465	22 320	21 294
Related temperature	[°C] [°F]	250 482	385 725	400 752
Max. differential pressure (inlet pressure minus outlet pressure)		22 bar (320 psig)		

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

* ASTM equivalent

Connections

Flanges: DIN, PN 40

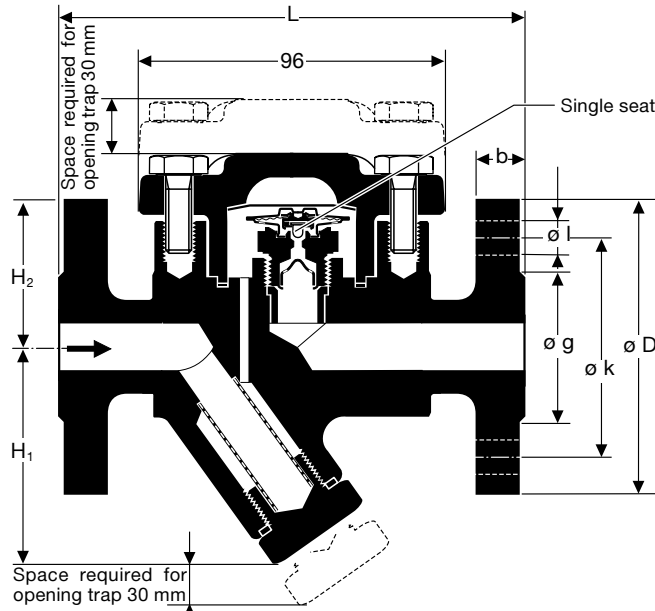
BS 10, tables E, F, H and J

ANSI (BS 1560) classes 150 or 300

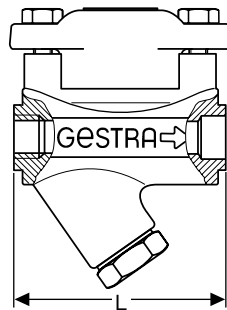
Screwed sockets: BSP or NPT (API)

Socket-weld ends

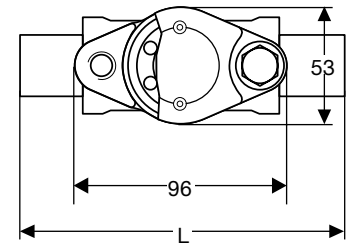
Butt-weld ends



MK 45-1 with flanged ends (to DIN)



MK 45-1, MK 45-2 with screwed sockets



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

Dimensions and Weight	End connections	End connections								
		Flanged to DIN			Screwed Socket-weld			Butt Weld		
Nominal sizes DN	mm in	15 1/2	20 3/4	25 1	15 1/2	20 3/4	25 1	15 1/2	20 3/4	25 1
Dimensions in mm	L	150	150	160	95	95	95	200	200	200
	H ₁		70		70	70		70	70	70
	H ₂		62		62	62		62	62	62
Approx. weight	kg	3.7	4.3	4.8	2.2	2.1	2.0	2.5	2.5	2.5

Flange dimensions	End connections	End connections								
		DIN			CL 150			CL 300		
Flange dimensions	D	95	105	115	88.9	98.4	107.9	95.2	117.5	123.8
	b	16	18	18	11.1	12.7	14.3	14.3	15.9	17.5
	k	65	75	85	60.3	69.8	79.4	66.7	82.5	88.9
	g	45	58	68	34.9	42.9	50.8	34.9	42.9	50.8
	l	14	14	14	15.9	15.9	15.9	15.9	19.0	19.0
Number of bolts		4	4	4	4	4	4	4	4	4



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Capacity Charts

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

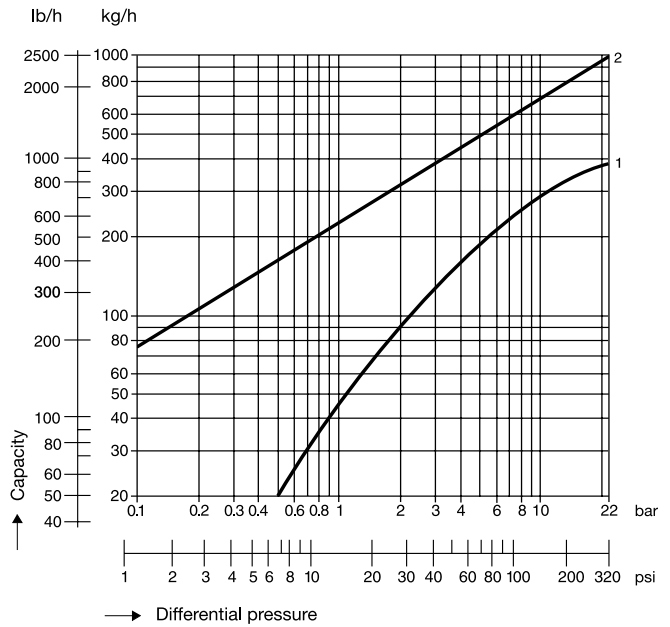
Curve 1

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.

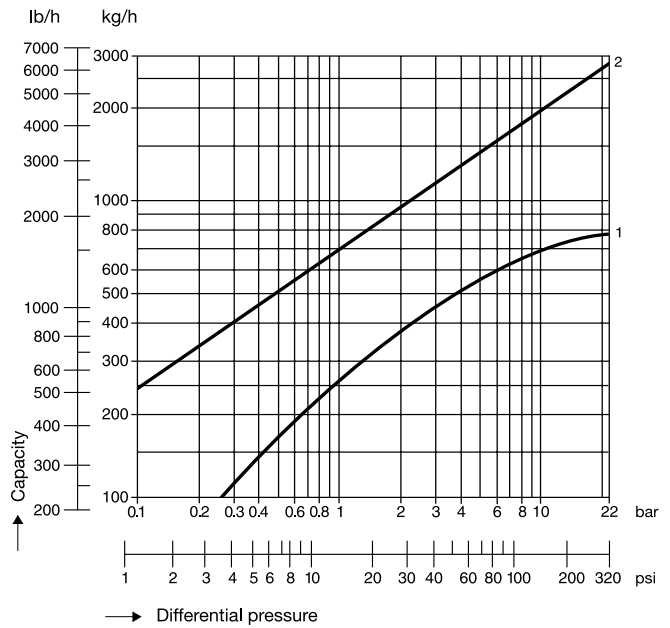
Curve 2

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



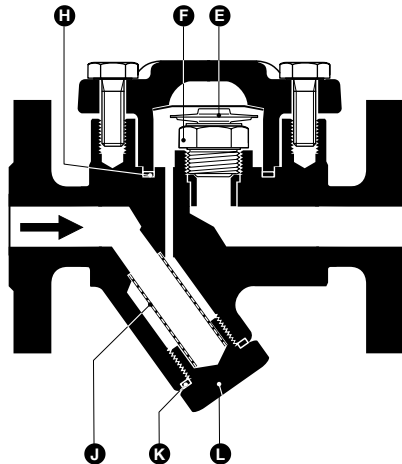
When ordering please state:

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	5 N 1	375109
		5 U 1	375111
		5 N 2	375110
		5 U 2	375112
J K L	Strainer, complete		375113
			375113
			375113
E	Thermostatic capsule MK 45-1	5 N 1	085585
		5 U 1	086138
	Thermostatic capsule MK 45-2	5 N 2	096530
		5 U 2	096535
H 1)	Cover gasket	375159	375159
K 1)	Strainer gasket	375162	375162

1) Minimum order quantity 50 items.
Contact your local dealer for smaller quantities.



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