GESTRA® Steam Traps & Valves · Product Range Group A1



AK 45

Condensate Drain Valve AK 45 PN 40, DN 15, 20, 25 (½", ¾", 1")

System Description

The AK 45 automatically drains condensate from steam systems during start-up, until the pressure in the system has reached the adjusted valve closing pressure.

At shut-down or when the pressure falls below the closing pressure the valve opens and accumulated condensate is automatically drained away.

Function

When there is no pressure the drain valve is held in the open position by the integral spring. As soon as the service pressure has reached the closing pressure to which the AK 45 has been adjusted, the valve closes (by the differential pressure acting on the valve cone against the force of the spring). When the pressure drops below the closing pressure, the AK 45 opens by spring force.

A hand purging knob is provided, so that the AK 45 can be opened by hand with the system under pressure to clear any deposits from the valve seat area.

The AK 45 is adjusted at our works to close at a differential pressure of 0.8 bar (12 psig).

The AK 45 is provided with an integral strainer.

Pressure/Temperature Rating							
Max. service pressure	[barg]	32	22	21			
	[psig]	465	320	305			
Related temperature	[°C]	250	385	400			
	[°F]	482	725	842			

Materials	DIN reference	ASTM equivalent		
Body	C 22.8 (1.0460)	A 105		
Cover screws	24 CrMo 5 (1.7258)	ASTM A 193 B 7		
Other internals	Stainless steel			

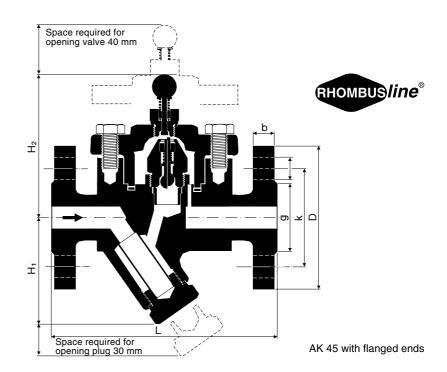
Connections

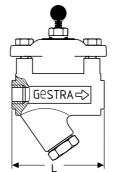
Flanges

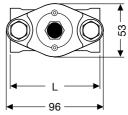
- DIN. PN 40
- ANSI 150 and 300
- B.S. 10, table E, F, H and J

Screwed sockets:

■ BSP and NPT







AK 45 with screwed sockets

AK 45 with screwed sockets

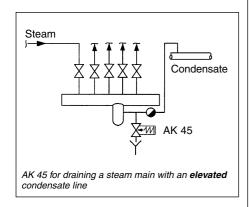
Dimensions	Dimensions			End connections					
and Weights			Flanged			Screwed			
Nominal size	[mm] [in]	15 ½	20 ¾	25 1	15 ½	20 ¾	25 1		
Dimensions	L H ₁ H ₂	150	150 70 97	160		95 70 97			
Approx. weight	[kg]	3.7	4.3	4.8	2.2	2.1	2.0		

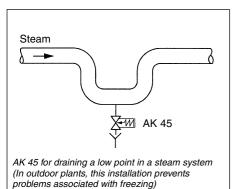
Flange dimensions		End connections								
		DIN		CL 150			CL 300			
Flange	D	95	105	115	88.9	98.4	107.9	95.2	117.5	123.8
dimensions	b	16	18	18	11.1	12.7	14.3	14.3	15.9	17.5
	k	65	75	85	60.3	69.8	79.4	66.7	82.5	88.9
	g	45	58	68	34.9	42.9	50.8	34.9	42.9	50.8
	Ĺ	14	14	14	15.9	15.9	15.9	15.9	19.0	19.0
Number of bolts	3	4 4 4		4	4	4	4	4	4	

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Installation

Install the AK 45 so that discharge is to open drain (without back-pressure), preferably in a vertical line with downwards flow. If it is necessary to install the AK 45 in a horizontal line, the pipe on the discharge of the trap should include a 90° downwards bend.





When ordering please state:

End connection, size (DN)

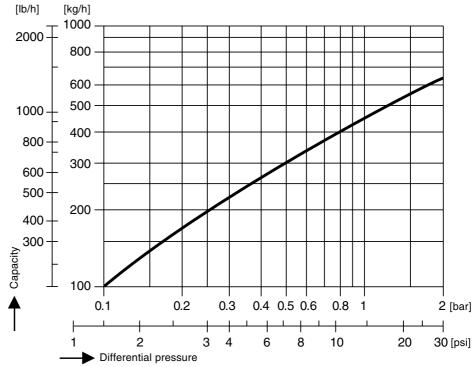
The following test certificate can be issued on request, at extra cost:

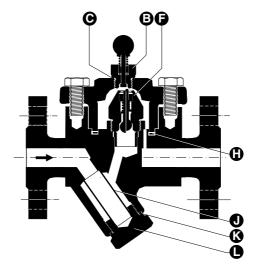
In accordance with DIN EN 10204/2.2 and -3.1 B. All inspection requirementes have to be stated with the order. After supply of the equipment certification cannot be established. For tests and inspection charges please consult us.

Supply in accordance with our general terms of business.

Capacity Chart

The chart shows the maximum capacities for cold condensate as a function of the differential pressure (without back pressure).





Item no.	Designation	Ref. no.
•	Valve insert	375 434
Θ	Gasket*) for hand purging knob (A 14 x 18) made of stainless steel	375 878
₿	Hand purging knob	375 435
•	Cover gasket*) (40 x 48 x 2), made of graphite	375 159
000	Strainer, seal plug and gasket	375 113
0	Gasket*) for seal plug (A 24 x 29), made of stainless steel	375 162

^{*)} Minimum order quantity 50 items. Contact your local dealer for smaller quantities.



GESTRA AG

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