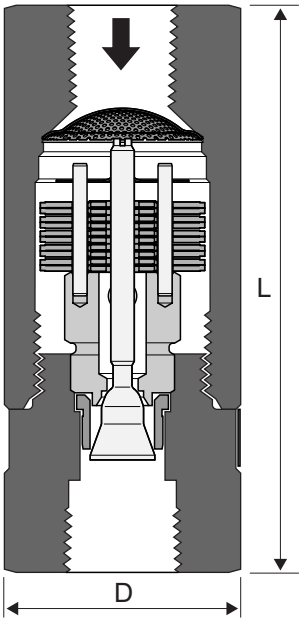


BK 37-5

Steam Trap

BK 37-5
Class 600
DN 10, 15, 20, 25 (NPS 3/8", ½", ¾", 1")

Description

Thermostatic/thermodynamic steam trap with corrosion resistant Thermovit regulator able to withstand waterhammer.
Integral strainer
Integral non-return valve action
Can be installed in any position.
The steam trap is adjusted to give steam-tight shut-off. Condensate is discharged with virtually no banking up.
BK 37-5 can also be used for air-venting.

End connections

The equipment is available with the following end connections:
Screwed sockets NPT to ASME B1.20.1 or G to EN ISO 228-1
Socket-weld ends to ASME B16.11 Cl 3000

Function

During start-up of the plant the steam trap is completely open. Cold condensate and air are discharged. As the temperature rises, the bimetallic plates deflect, drawing the stage nozzle towards the closed position.
Just before the condensate reaches saturated steam temperature the stage nozzle is shut off tight. The thermodynamic effect of the stage nozzle chamber assists in the closing process.
The steam trap automatically vents air and non-condensable gases at start-up and during operation of the plant.

Pressure & temperature ratings

Limiting conditions for body to ASME B 16.34-2013, table 2-1.1						
p (pressure) [bar]	102.1	87.6	79.6	75.1	69.4	57.5
T (temperature) [°C]	–29/ +38	200	300	350	400	425
ΔPMX (max. admissible differential pressure) [bar]	45					

Limiting conditions for body to ASME B 16.34-2013, table 2-1.1						
p (pressure) [psig]	1,480	1,205	1,135	1,060	1,015	825
T (temperature) [°F]	-20/ +100	500	600	700	750	800
ΔPMX (max. admissible differential pressure) [psi]	652					

Materials

The equipment is made from the following materials:

Component part	**ASTM**
Body	A105
Thermovit regulator	Stainless steel with bimetallic plates
Other internals	Stainless steel

Dimensions and weights

Dimensions	[mm]	[inch]
D	50	1.97"
L	120	4.72"

Weights					
Nominal size	DN [mm]	10	15	20	25
	NPS [inch]	3/8	½	¾	1
Weight	[kg]	1.4	1.38	1.32	1.23
	[lbs]	3.09	3.04	2.91	2.71

Steam Trap

BK 37-5
Class 600
DN 10, 15, 20, 25
(NPS ³/₈", ½", ¾", 1")

Capacity Chart

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

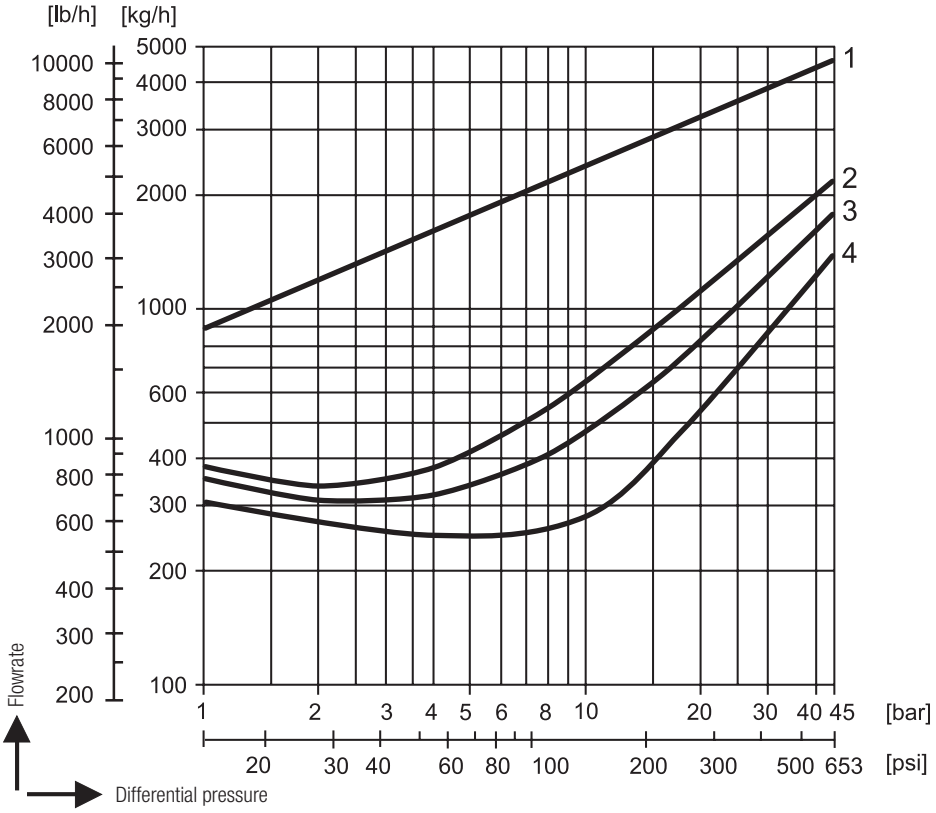
Curve 1
Capacity for cold condensate at 20 °C.

Curve 2
This curve indicates the max. capacity of hot condensate that the steam trap BK 37-5 (1") can discharge with virtually no banking up.

Curve 3
This curve indicates the max. capacity of hot condensate that the steam traps BK 37-5 (½", ¾") can discharge with virtually no banking up.

Curve 4
This curve indicates the max. capacity of hot condensate that the steam trap BK 37-5 (³/₈") can discharge with virtually no banking up.

Capacity Chart



PED (Pressure Equipment Directive)

The equipment is excluded from the scope of the PED according to section 3.3 and must not bear a CE marking.

The equipment fulfils the requirements of the Pressure Equipment Directive PED 97/23/EC and can be used for the following fluids:

Fluids of group 2

ATEX

The equipment does not have its own potential source of ignition and is therefore not subject to the ATEX Directive 94/9/EC.

The equipment is not Ex marked.

Please observe the following notes if the equipment is to be used in explosion-risk areas:

The equipment can be used in zones (surrounding atmosphere acc. to Directive 1999/92/EC) 0, 1, 2, 20, 21 and 22 (ATEX Directive 94/9/EC).

Make sure that the operating fluid does not generate a surface temperature that exceeds the limit specified for the place of installation.

If the equipment is electrically insulated when installed between pipe connections appropriate measures must be taken to discharge any static electricity.

Supply in accordance with our general terms of business.

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