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## Gestra® Steam Trap • Thermostatic Steam Trap

## Class Rating: ANSI 600

### Application

The BK 28 is designed for high pressure drip applications including: steam main drip, turbine drain, etc. Excellent for superheated steam drip applications.

#### **Features and Benefits**

- Forged alloy steel body with thick Titanium Body Shield to resist flashing damage.
- Titanium alloy valve and seat.
- Pressure assisted "fail open-only" design.
- Standard factory setting discharges hot condensate in a modulating fashion at approximately 18°F (10°C) below saturation temperatures throughout its operating range.
- One internal bimetallic regulator for all applicable body pressure ranges. Single replacement part.
- Staged "control valve-style" nozzle reduces wiredrawing damage by reducing flashing. Totally unaffected by water hammer.
- Self draining will not freeze when installed in gravity drainage position. Can be installed in any position.
- Automatically vents air and non-condensable gases and has a very high (7:1) cold water capacity for rapid start-up.
- Operates with **zero steam loss** throughout its operating range saving steam and money during the life of the trap.
- Easy in-line inspection and maintenance no need to remove the trap from the piping to clean or replace the internals.
- Internal stainless steel strainer.
- · Integral check valve design.
- Two (2) year guarantee.

#### Materials

- Body and Cover ASTM-A182 F12
- Body Insert Titanium
- Cover Bolts ASTM A193 B7 (DIN 1.7258)
- Bimetallic Regulator SST Steels and Titanium
- Other Internals Stainless Steel

### Available Sizes: ½", ¾" and 1" (DN 15, 20 and 25)



Pressure [bar] [psi]



Pressure / Temperature Ratings							
Maximum Service Pressure	[psig]	1233	972				
	[barg]	85	67				
Related Temperature	[°F]	572	842				
	[°C]	300	450				
Maximum Differential Pressure	1230 psig (85 barg)						

Dimensions and Weights		End Connections									
		Flanged		Screwed Socket-Weld		Butt-Weld					
Nominal Sizes		[inch]	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1
		[mm]	15	20	25	15	20	25	15	20	25
Dimensions	L	[inch]	9.1		6.3		6.3				
		[mm]	230		160		160				
Approx. Weight		[lbs]	13.9 15.8 15.8 11.9			11.2					
1		[kg]	6.3	7.2	7.2		5.4			5.1	

## *BK 28* **1230** psi Maximum Δp

(85 bar)

49



1230

psi Maximum ∆p

(85 bar)

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Standard Spare Parts						
ltem Number	Description	BK 37				
D	Regulator	377722				
E	Cover Gasket	372095				
F	Strainer	096701				
G	Cover Bolt	013644				
Н	Nuts (not shown)	013574				

### Available Sizes: 1/2", 3/4" and 1" (DN 15, 20 and 25)

### **Capacity Charts**

The chart shows the maximum capacities for hot and cold condensate. The capacities are a function of differential pressure or the difference between inlet and outlet pressures for the trap.

Curve 1 shows the maximum capacity when discharging hot condensate that is **18°F** (10°C) below steam saturation temperature. For example, at a differential pressure of **650 psi** the maximum hot capacity is approximately **900 lb/hr**.

Curve 2 shows the maximum capacity when discharging cold condensate at a temperature of **68°F** (20°C). For example, at a differential pressure of **650 psi** the maximum cold capacity is approximately **9,000 lb/hr**.

### **Temperature Discharge Options**

Special factory adjustment of the regulator for increased undercooling is available for open discharge applications where sensible heat savings and flash steam suppression are desirable. Additionally, the regulator can also be adjusted for hotter discharge (less subcooling) if required. Please contact your local Gestra representative for more details.

### **Body Pressure/Temperature Ratings**

The curve shows the maximum shell (body) pressure and temperature rating. Operating differential pressure is limited to **1,230 psi** (85 bar).

### **Material/Test Certificates**

All inspection requirements must be stated at time of order. Test certificates can be issued upon request in accordance with EN 10204 - 2.2 and -3.1B. Heat codes from Body and Cover are required.

#### Available End Connections NPT. BSP

Flanges: ANSI 600 (DIN PN 40)

Socket-weld, Butt weld

### How to Order

Specify trap, end connection size and type.

For Example: BK 28 1/2" SW