

## Level Actuated, Pneumatically Operated

- Rugged...designed for heavy duty service and heavily contaminated condensate
- Models with discharge rates of 3 or 24 gal/h, 11 or 91 L/h
- Maximum working pressures of 300 and 500 psig, 21 and 35 kgf/cm<sup>2</sup>

Hankison® Trip-L-Trap condensate drains automatically discharge water, oil, and oil/water emulsions from separators, receiver tanks, dryers, filters, and drip legs.

Installing Hankison automatic condensate drains reduces operating costs by saving man hours and air wasted through open ports and downtime caused by liquid flooded systems.

## Features

### Reliable Operation

- Unlike simple float operated drains, the Trip-L-Trap features an air powered piston for positive opening and closing of the discharge port
- Large discharge port prevents clogging
- Only two moving parts
- Operating mechanism protected from contaminants by a baffle
- Stainless steel floats won't lose buoyancy like porous floats
- Magnetic action
  - Allows large amounts of condensate to be collected between operations
  - Prevents external vibrations from causing unnecessary discharges
- Resilient pilot valve seat won't leak
- Standard models have stainless steel mechanisms; all stainless steel models available
- A skim tube ensures that oil slicks are discharged first
- Impervious to synthetic lubricants
- Rebuildable...repair parts kit available
- Every drain inspected and performance tested

### Economical...

#### no wasted compressed air

- Level actuated...operates on demand... discharges only when necessary
- Discharge port closes before any compressed air is lost
- Soft seated discharge port assures tight closures
- Air pressure in housing creates a positive seal...prevents air loss between operations

### Versatile...

#### can be adapted to many applications

- Choice of capacities
- Choice of maximum working pressures
- All stainless steel construction available
- Top connection models...for installations where drain can be suspended below vessel
- Bottom connection models...for installations with minimal clearance



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## TRIP-L-TRAP®

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## AUTOMATIC

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## CONDENSATE

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## DRAINS

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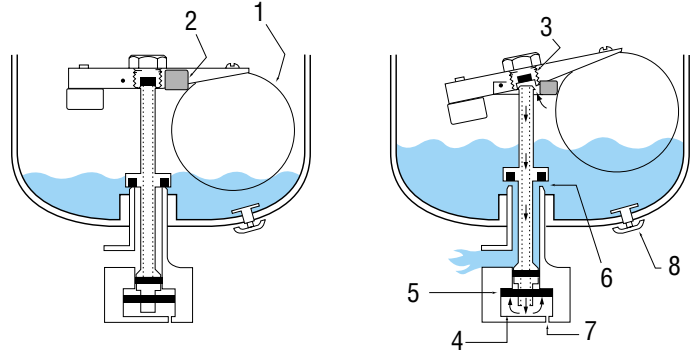
## Operation

Positive discharge of condensate without loss of air  
**LEVEL ACTUATED, PILOT CONTROLLED**...As condensate collects in the drain housing, a float (1) is held firmly in place by a magnet (2). When the condensate level rises sufficiently, the buoyancy of the float overcomes the holding force of the magnet and the pilot valve (3) trips open.

**POWER OPERATED**...When the pilot valve opens, compressed air enters air cylinder (4), forcefully moving piston assembly (5) upwards, opening a large discharge port (6). Condensate is then forced out of the discharge port.

After the condensate has been discharged, the float drops and pilot valve (3) closes. Compressed air in piston cylinder (4) bleeds off through bleed hole (7). Air pressure in the housing then moves piston assembly (5) the opposite way, closing the discharge port and holding it securely shut until the next operation.

All models can be manually drained and depressurized, through manual drain (8).



## Model Selection

Series	Type	Model	Maximum Operating Pressure		Capacity (1)	Materials of Construction
			psig	kgf/cm <sup>2</sup>		
505 Series Discharges 0.4 pt, 190 cc per operation	Top Connection	505	300	21	3 gal/h, 11.4 L/h	Carbon steel housing; Stainless steel, brass, delrin, nylon mechanical parts; Viton seals  All stainless steel models optional (2)
	Bottom Connection	505HP	500	35		
		505BC 505BCHP	300 500	21 35		
506 Series Discharges 3.2 pt, 1514 cc per operation	Top Connection	506	300	21	24 gal/h, 90.8 L/h	
	Bottom Connection	506HP	500	35		
		506BC 506BCHP	300 500	21 35		

(1) Based on one cycle per minute. Drains are designed to operate at one discharge per minute for one year before rebuilding is required. Operation at more than one discharge per minute may require more frequent rebuilding. Maximum capacity is six discharges per minute.

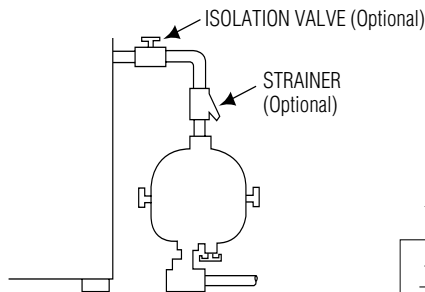
(2) Stainless steel models available. Materials of construction are 304SS housing, stainless steel mechanical parts and Viton seals. To designate stainless steel models add SS to model number (e.g. 505SS)

## Operating Conditions

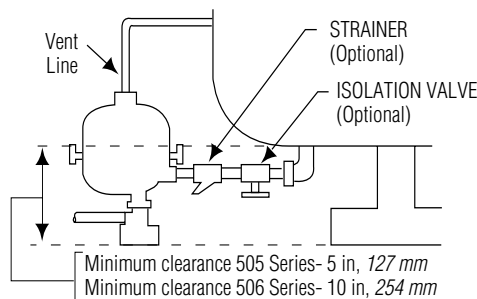
1. Minimum operating pressure: 10 psig, 0.7 kgf/cm<sup>2</sup>.
2. Maximum operating temperature: 150°F, 66°C.
3. Minimum operating temperature: 35°F, 2°C.

## Dimensions and Connections

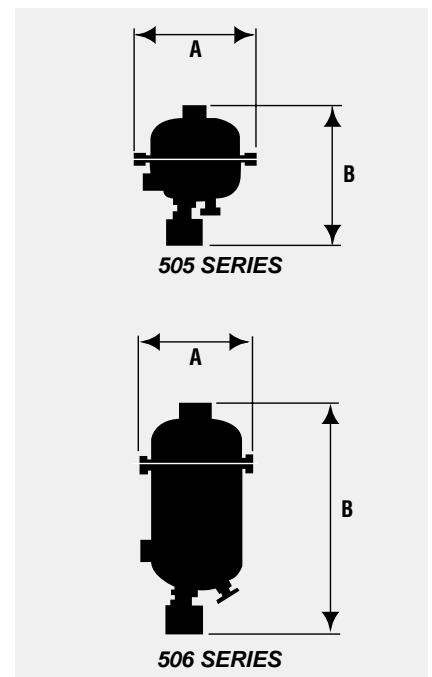
Model	A		B		Inlet Connection NPT or BSP	Drain Connection
	in	mm	in	mm		
505 Series	7	178	8.5	216	3/4"	1/4"
506 Series	7	178	13.75	349	3/4"	1/4"



TOP INLET CONNECTION MODELS



BOTTOM INLET CONNECTION MODELS



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