

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/cm²

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®

AUTOMATIC

CONDENSATE

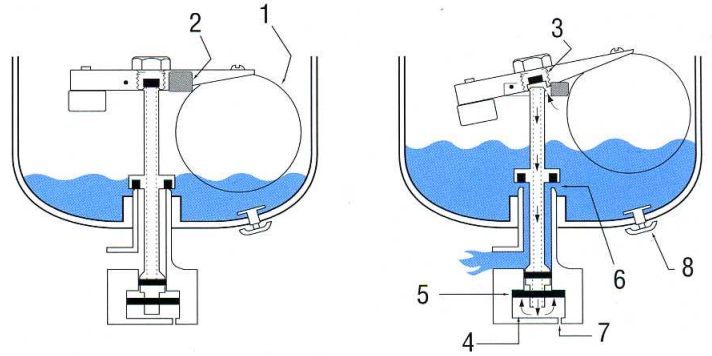
DRAINS

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 ²		
505 Series Discharges 0.4 pt, 190 cc per operation	Top Connection	505 505HP	300 500	21 35	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	505BC 505BCHP	300 500	21 35		
506 Series Discharges 3.2 pt, 1514 cc per operation	Top Connection	506 506HP	300 500	21 35	24 gal/h, 90.8 L/h	
	Bottom Connection	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.

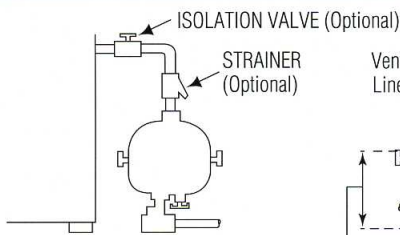
(2) Stainless steel models available. Materials of construction are 304SS housing, stainless steel mechanical parts and Viton seals. To designate stainless steel models add SS to model number (e.g. 505SS)

Operating Conditions

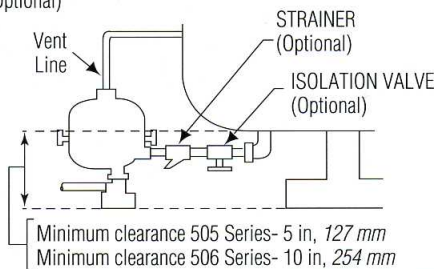
1. Minimum operating pressure: 10 psig, 0.7 kgf/cm².
2. Maximum operating temperature: 150°F, 66°C.
3. Minimum operating temperature: 35°F, 2°C.

Dimensions and Connections

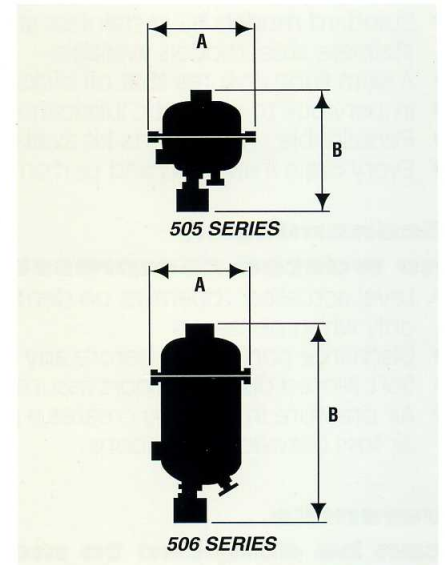
Model	A		B		Inlet Connection NPT or BSP	Drain Connection
	in	mm	in	mm		
505 Series	7	178	8.5	216	3/4"	1/4"
506 Series	7	178	13.75	349	3/4"	1/4"



TOP INLET CONNECTION MODELS



BOTTOM INLET CONNECTION MODELS



Global Leader in Efficiently Treating Compressed Air



HANKISON
INTERNATIONAL

MEMBER OF



hankisonintl.com

Division of Hansen Inc.
Canonsburg, PA 15317-1700 U.S.A.
Tel 724-745-1555 Fax 724-745-6040

MEETING GLOBAL STANDARDS



**Easy to install, operate
and maintain**

**Hankison automatic condensate
drains reliably discharge water,
oil, and oil/water mixtures from
separators, receiver tanks,
dryers, filters, and drip legs**

**Installing Hankison automatic
condensate drains reduces
operating costs by saving:**

- Man hours spent manually draining compressed air lines and equipment
- Compressed air wasted when valves are left open to bleed off condensate
- Downtime when unattended air lines fill with liquid and flood the air system

531 Series

- Economical design
- Direct acting solenoid valve
- Designed for standard system pressure of 0 - 175 psi (0 - 12.2 kgf/cm²)
- 1/4" and 1/2" connection sizes available
- Complete with strainer

532 Series

- Resistant to large particles 1/2" maximum diameter
- Internal pilot operated diaphragm solenoid valve
- High pressure model available with maximum working pressure of 1500 psi (105 kgf/cm²)
- Complete with strainer (not available on the high pressure drain)

533 Series

- Rugged design able to operate in the most demanding environments
- Resistant to large particles 1/2" maximum diameter
- External pilot operated diaphragm solenoid valve



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AUTOMATIC

ELECTRIC

TIMED DRAIN

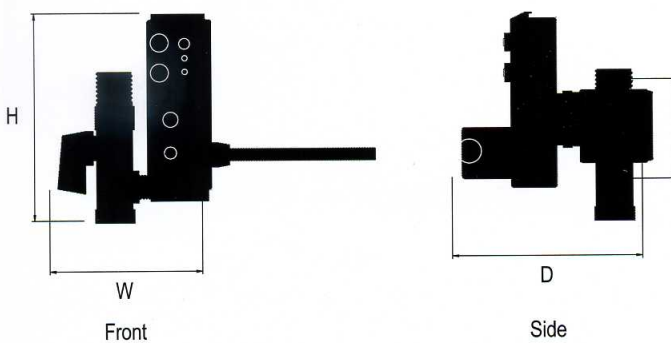
SERIES

SPX Air Treatment

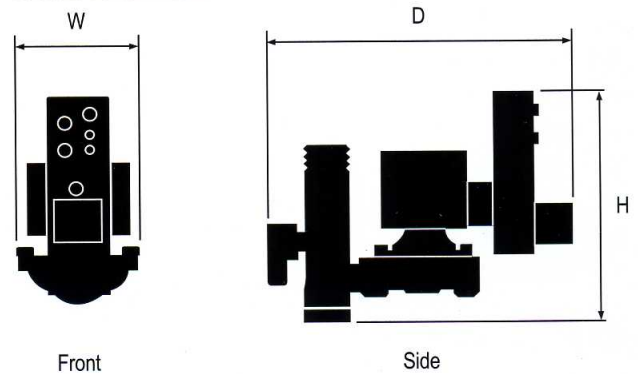
531, 532 and 533 Series Product Specifications

Model	Min. / Max. Working Pressure		Max. Operating Temperature	Electrical	Valve Type	Orifice Size		Connections	Dimensions							
	psig	kgf/cm ²				H			W		D		Weight			
						in.	mm		in.	mm	in.	mm	lb.	kg		
531-02-1	0 / 175	0 / 12.3	120°F (49°C)	115-60/100-50 or 230-60/200-50 NEMA 4/4X	Direct Acting	0.125	3.20	1/4"	3.90	99	1.69	43	3.90	99	3	1
531-04-1	0 / 175	0 / 12.3	120°F (49°C)		Direct Acting	0.177	4.50	1/2"	4.40	112	1.69	43	3.90	99	4	2
532-04-200S	5 / 200	0.35 / 14.0	120°F (49°C)		Internal Pilot	0.625	16.00	1/2"	5.13	130	2.25	57	7.88	200	4	2
532-02-300S	5 / 300	0.35 / 21.0	120°F (49°C)		Operated Diaphragm	0.625	16.00	1/2"	5.56	141	2.25	57	7.88	200	3	1
532-02-1500	5 / 1500	0.35 / 105.0	120°F (49°C)		Direct Acting	0.047	1.20	1/4"	4.38	111	1.69	43	4.88	124	2	1
533-04-300	5 / 300	0.35 / 21.0	120°F (49°C)		Internal Pilot	0.500	13.00	1/2"	5.31	135	2.00	51	5.00	127	2	1
533-04-300F	5 / 300	0.35 / 21.0	120°F (49°C)	Operated Diaphragm	0.500	13.00	1/2"	6.25	159	2.00	51	7.00	178	3	1	

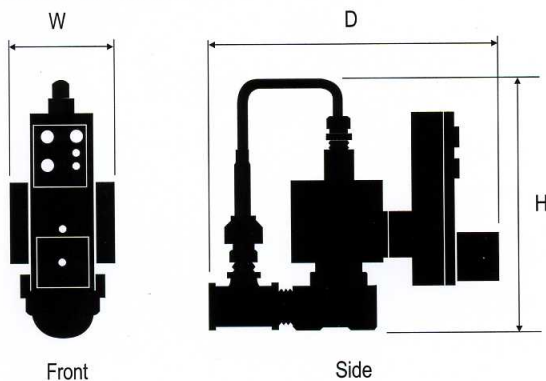
531 Series



532 Series



533 Series



SPX HANKISON

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Improvements and research are continuous at SPX Hankison
Specifications may change without notice.



Level Actuated, Pneumatically Operated

- Economical drain for light to medium duty service
- Discharges 0.04 pt, 20 cc per operation (0.3 gal/h, 1.2 L/h)
- Maximum working pressures to 175 psig, 12.3 kgf/cm²

Hankison® Snap-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 spent manually draining compressed air lines and equipment
- Compressed air wasted when valves are left open to bleed off condensate
- Downtime when unattended air lines fill with liquid and flood the air system

Features

Reliable Operation

- Tested to over a million cycles...field proven in tens of thousands of applications
- Only two moving parts
- Operating mechanism protected from contaminants by a baffle
- Durable, self bailing, solid surface float... won't lose buoyancy like porous floats
- Magnetic snap action...causes rapid opening and closing of pilot valve
- Resilient pilot valve seat...uses peeling action for smooth operation
- Air powered piston for positive opening and closing of discharge port
- Discharge port protected against clogging by a built in stainless steel screen
- Bleed hole precision drilled in industrial ruby to resist wear and protected by a screen to prevent plugging
- 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
- Magnet prevents external vibrations from causing unnecessary discharges



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SNAP-TRAP®

AUTOMATIC

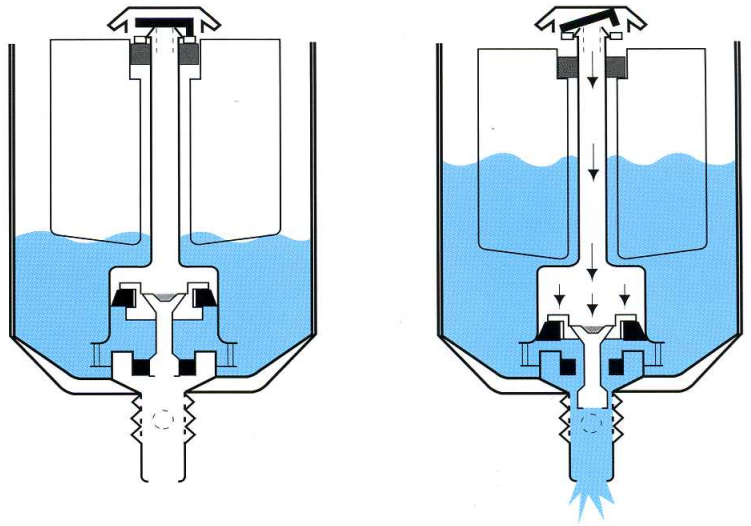
CONDENSATE

DRAINS

SPX Air Treatment

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). This eliminates level seeking and allows the collection of additional condensate before the buoyant force of the float overcomes the holding force of the magnet and the pilot valve (3) snaps open. POWER OPERATED...When the pilot valve opens, compressed air enters air cylinder (4), forcefully moving piston (5), which opens discharge port (6). Condensate is then forced through a stainless steel screen (7) and out 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 (8). Air pressure in the housing then moves piston (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.



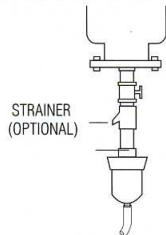
Model Selection

Model	Minimum/Maximum Operating Pressure		Minimum/Maximum Operating Pressure		Materials of Construction		Discharge Per Operation	Nominal Capacity (One cycle per minute)
	psig	kgf/cm ²	°F	°C	Bowl	Internals		
503 Top Connection	20 / 150	1.4 / 10.6	35 / 120	2 / 49	Polycarbonate housing c/w bowl guard	Polycarbonate mechanical parts Buna N seals	0.04 pints 20 cc	0.3 gals/h 1.2 L/h
507 Bottom Connection								
504 Top Connection	20 / 175	1.4 / 12.3	35 / 120	2 / 49	Epoxy coated zinc housing c/w sight glass	Delrin mechanical parts; Viton seals Impervious to synthetic lubricants		
508 Bottom Connection								

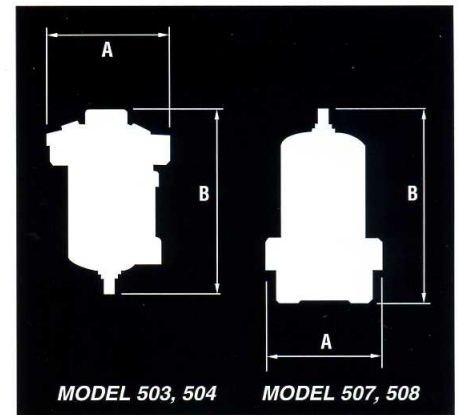
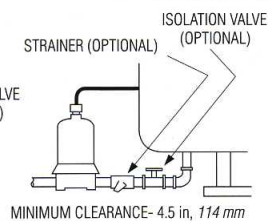
Dimensions and Connections

Model	A		B		Inlet Connection NPT/BSP	Drain Connection
	in	mm	in	mm		
503 504	3.75	95	6.38	162	1/2"	5/16" Tube 5/16" Tube
507 508	3.75	95	7	178	3/8"	3/8" NPT/BSP 3/8" NPT/BSP

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Improvements and research are continuous at SPX Hankison.
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