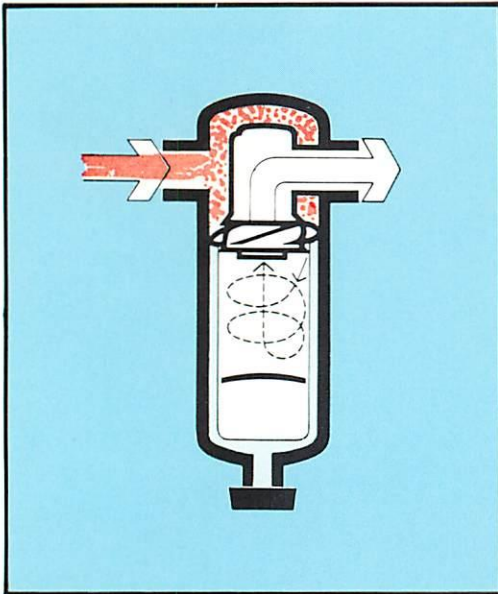


Centrifugal Separators



Centrifugal Separation

Why Use A Centrifugal Separator?

The aftercooler in a compressed air system performs two basic functions: (1) Lowers the compressed air or gas temperature (2) Condenses water vapor. It is this condensed water which can cause system problems. The most effective (99%+ at rated flows) method of removing condensed water from a system is the centrifugal type separator.

The Separation Process:

The entering moisture laden air is forced to pass through directional impellers which spin the air around the separator body. Droplets of water are impinged on the separator wall by centrifugal force. Maximum velocity is reached near the bottom of the lower chamber where a "Vortex" is formed. The water droplets coagulate and drain from the separator while the air travels up through the "Vortex" at a reduced velocity and exits the separator.

Design Benefits:

The Hiross centrifugal separators offer several outstanding features with capacities to 25,000 scfm.

- a) High separation efficiency
- b) Low pressure drop
- c) Minimum 200 psi rating as standard



Cast Separators

Cast Separators: (S01 to S03)

Designed in three (3) sizes with capacities up to 550 SCFM, @ 100 psig, these cast aluminum separators feature a unique patented locking (Quick Loc™) system which eliminates any possibility of opening the separator while it is under pressure; yet permits dismantling, without tools, for inspection and cleaning when the system is shut down for maintenance. A computer designed centrifuge and anti re-entrainment baffle are both removable for inspection and cleaning. Air and drain connections are all NPT. Standard pressure rating is 230 psig.

For Compressed Air Systems

Fabricated Separators: (S04 to S15):

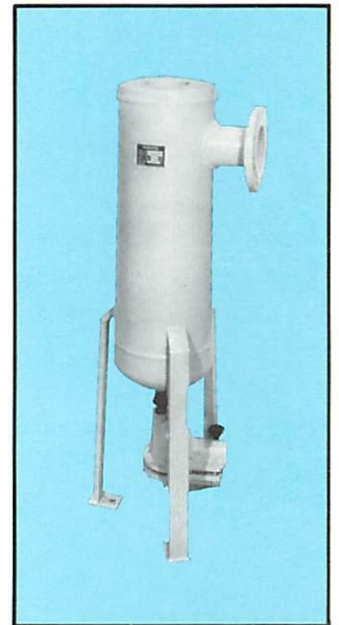
These units are offered in two configurations: **Horizontal** or pipeline type, where the inlet and outlet connections are horizontal to the body; **Vertical** where the inlet connection is vertical, entering the top of the separator. Both configurations are fabricated from heavy gauge steel providing dependable operation and a long service life. The centrifuge is cast aluminum and welded in place ensuring no by-pass. All units are constructed in compliance with ASME codes of practice. Standard units are rated at 200 psig working pressure with one inch NPT drain connection. Consult factory for higher pressures and special materials. Capacity in this range is 900 scfm to 25,000 scfm @ 100 psig.

Performance:

Hiross separators offer an extremely high efficient condensate removal to pressure drop ratio. At rated capacity, the Hiross units will remove more than 99% of the moisture condensed. Pressure drops can be found in the chart below.

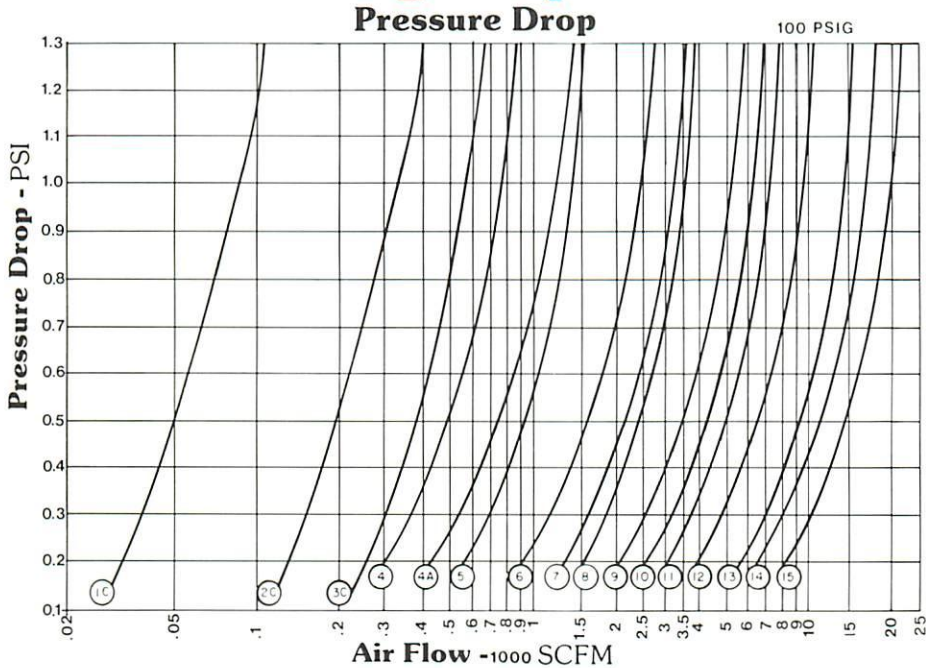


Horizontal



Vertical

Centrifugal Separators

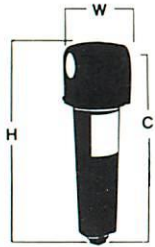


Accessories:

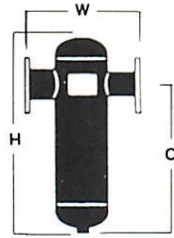
Hiross external drain traps are available for all separators. These traps feature a unique manual blow down which enables the trap to be cleaned in service. Pressures are available to 1,000 psig on external traps.



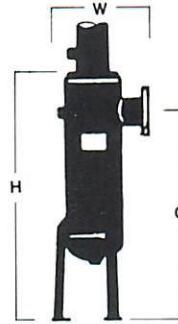
Dimensions:



S01C-S03C



S04H-S15H



S04V-S09V

Standard Horizontal

Model	Capacity SCFM	Height H	Width W	C	Air Connections		Weight (Lbs.)	Recom. Drain Trap
					In	Out		
S01CB0H0	100	9-3/4	3-1/2	8-3/4	3/4 NPT	3/4 NPT	2	SAC120
S02CB0H0	300	13-3/4	4-13/32	12-1/2	1-1/2 NPT	1-1/2 NPT	4	SAC120
S03CB0H0	550	21-3/4	5-25/32	20-3/32	2 NPT	2 NPT	12	SAC120
S04HAMH0	900	26	14-3/4	19-1/4	2-1/2 FLG	2-1/2 FLG	56	SAC120
S4AHAMH0	1,400	29	16	21-1/4	3 FLG	3 FLG	85	SAC120
S05HAMH0	1,500	34	20	25-7/8	4 FLG	4 FLG	120	SAC120
S06HAMH0	2,800	38-3/4	22	28-3/4	5 FLG	5 FLG	200	SAC120
S07HAMH0	3,600	42	23	30-1/2	6 FLG	6 FLG	250	SAC120
S08HAMH0	3,900	45-3/4	26	33-3/4	8 FLG	8 FLG	350	SAC100
S09HAUH0	5,800	50-1/4	30	36-3/4	8 FLG	8 FLG	400	SAC100
S10HAUH0	6,800	58-3/4	30	43	8 FLG	8 FLG	750	SAC100
S11HAUH0	7,800	66-1/2	34-1/2	49-1/4	14 FLG	8 FLG	900	SAC100
S12HAUH0	10,200	69-1/2	36-1/2	51-3/4	14 FLG	8 FLG	1100	SAC100
S13HAUH0	14,000	87-1/8	44-1/2	64-1/4	18 FLG	10 FLG	2000	SAC100
S14HAUH0	17,000	96-3/4	50	70-1/4	20 FLG	12 FLG	3100	SAC100
S15HAUH0	25,000	120-1/2	57	89-3/4	24 FLG	12 FLG	4200	SAC100

Standard Vertical

S04VAMH0	900	37-1/8	13-1/16	32-1/2	2-1/2 FLG	2-1/2 FLG	64	SAC120
S4AVAMH0	1,400	39-5/8	13-3/4	34-3/8	3 FLG	3 FLG	86	SAC120
S05VAMH0	1,500	45-1/2	15-1/8	39-1/2	4 FLG	4 FLG	132	SAC120
S06VAMH0	2,800	48-5/8	18-1/8	41-7/8	5 FLG	5 FLG	175	SAC120
S07VAMH0	3,600	51-1/8	20-1/8	43-7/8	8 FLG	6 FLG	225	SAC120
S08VAMH0	3,900	55-1/8	21-3/4	46-5/8	10 FLG	8 FLG	330	SAC100
S09VAUH0	5,800	58-7/8	23-3/4	49-3/8	10 FLG	8 FLG	380	SAC100

'B' in model no. - 230 psig mawp

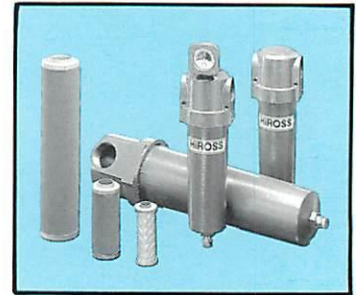
'A' in model no. - 200 psig mawp

Drain conn. - 1/2" NPT Models S01-S03

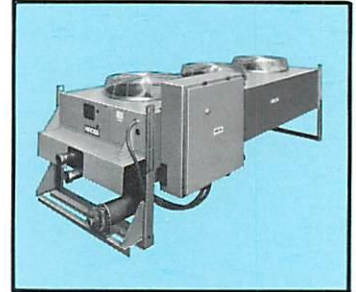
Drain conn. - 1" NPT Models S04-S15

S04 and larger are also available for high pressure and special materials. Consult factory.

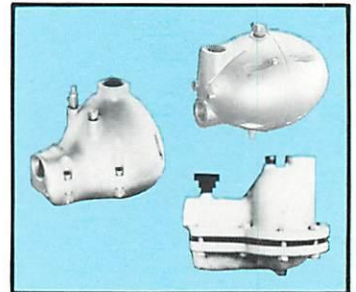
Other HIROSS Products:



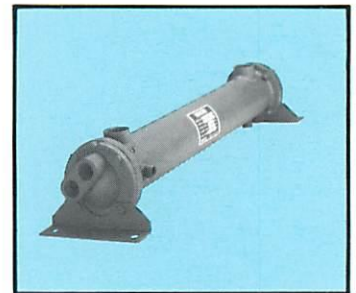
FILTERS



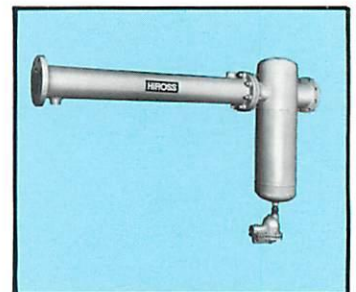
CLOSED CIRCUIT WATERCOOLER



DRAIN TRAPS



OIL COOLERS



WATERCOOLED AFTERCOOLERS



AIRCOOLED AFTERCOOLERS