

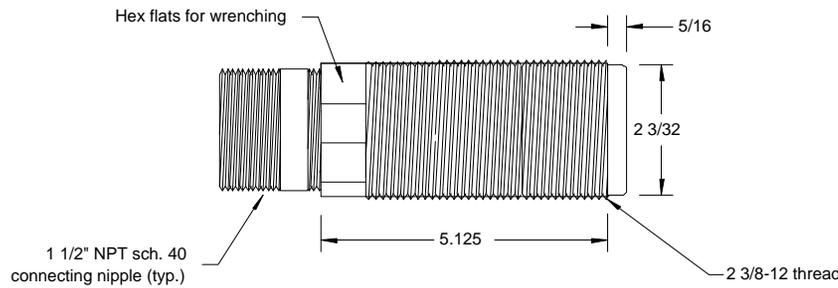
## Model VA-51 (2")



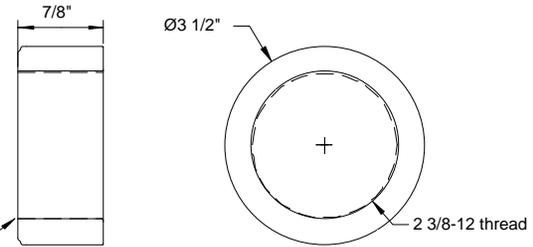
- ❑ For large hoppers, chutes, mixers, blenders, etc.
- ❑ Activates 6-8' diameter of material
- ❑ Uses (approx.) 2.8 cf per pulse @ 90 psi

# VA-51-T Airsweep<sup>®</sup> and mounting options

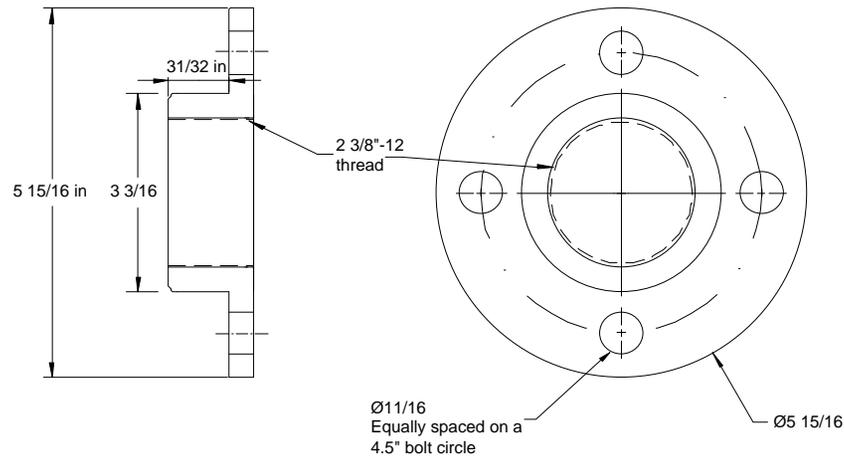
## VA-51-T Airsweep (threaded mount style)



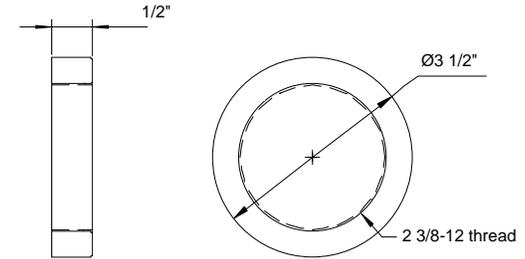
## MC-51-T Mounting Coupling (for curved walls)



## MF-51-T Mounting Flange (for flat walls)



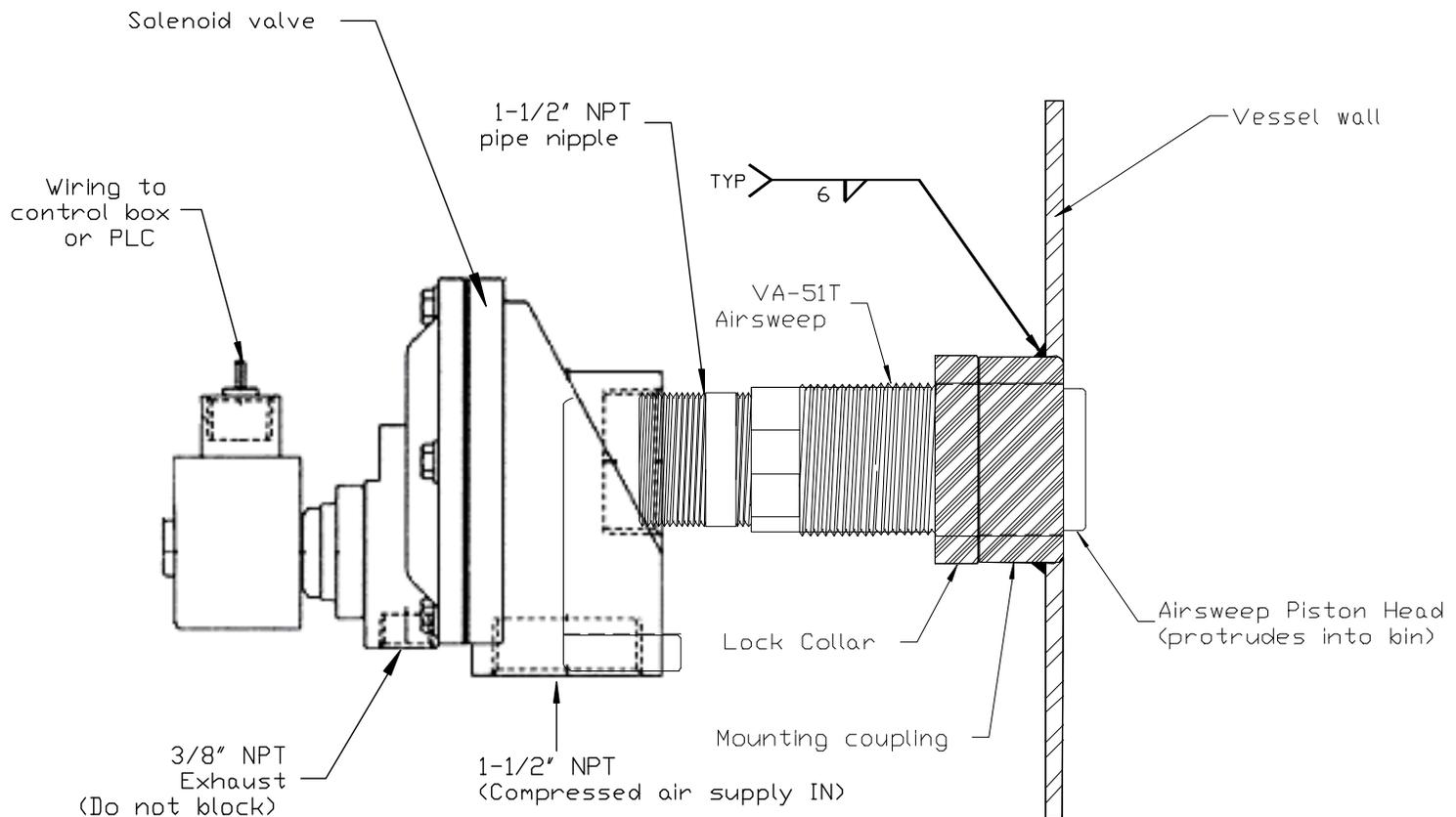
## LC-51-T Lock Collar



Materials of Construction	Diaphragm valve port size	Air Pressure (PSI)	Air Sweep Diameter *	Air consumption (scf) (per 0.25-second pulse)
Carbon Steel	1 1/2 "	80	6'	2.1 cubic feet
304 or 316 SS		100	8'	2.99 cubic feet
(other – call factory)				

\* Average effective diameter of material activation in 75 lbs. per cubic ft. (dry) material, 0.25 sec. air pulse

## MC-51T Mounting Coupling Installation



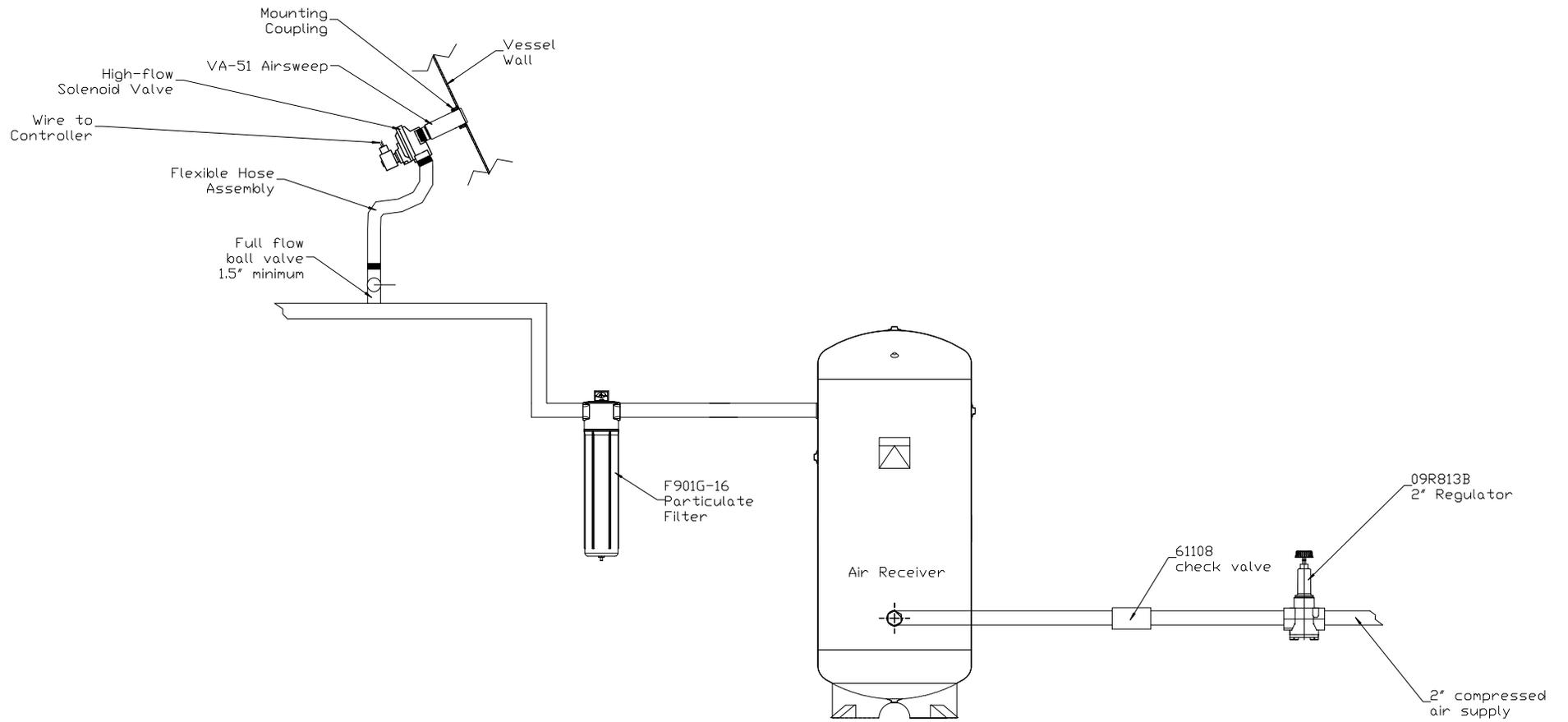
### VA-51 Airsweep and solenoid valve

1. Cut hole in hopper wall to accommodate a close-fitting insertion of coupling. A hole saw size of 3 -1/2" diameter will generally suffice to create an opening slightly larger than the coupling's outside dimension.
2. Align front of coupling flush with inside of vessel wall and weld continuous bead to exterior of wall.
3. Apply anti-seize compound to front threaded section of Airsweep. Thread Airsweep into position, so that front of **body** of Airsweep is aligned with front of coupling. This will properly position piston head within the bin and allow the air pulse to sweep along the inner bin wall when piston opens.
4. After position of Airsweep is determined to be correct, tighten lock collar against coupling to keep Airsweep in position.

**Note:** On sharply curved bin walls, body of Airsweep will extend slightly into the bin at top & bottom (12:00 & 6:00 positions), and should be flush at sides (3:00 & 9:00 positions).

- Exhaust port (3/8" NPT) on solenoid valve should never be covered or blocked, as valve will not function properly with backpressure to this port. Only connect a 3/8" NPT full-flow muffler, if required.
- For maximum effectiveness, connection between Airsweep and solenoid valve should be as short as possible. When possible, use only the supplied connecting nipple with no additional elbows or pipe.

# Typical piping and accessories, VA-51 Airsweep system



**TYPICAL OPERATING PARAMETERS / COMPRESSED AIR CONSUMPTION**

**Model VA-51 AIRSWEEP**

Recommended operating pressure: 80-100 psi

Typical effective radius of material activation (dry ,powdered material, 60-75 lbs/ft<sup>3</sup>):  
3 to 4 feet around each nozzle.

Recommended pulse time: 1/4 second.

Approximate per-pulse consumption rate (1/4 sec. pulse): 2.72 cubic feet @ 90 psi.

Typical sequence rate range (application/material-dependent):  
3 pulses - 12 pulses per minute.

Typical (approximate) consumption rate range (based on the preceding typical sequence rate range):  
8.16 - 32.64 cfm @ 90 psi.

