



Stainless Steel Sump Ejector

Armstrong Condensate Management Group offers a stainless steel sump ejector for use in draining unwanted water from steam pits, steam tunnels or enclosed spaces. The stainless steel sump ejector uses a snap-acting Inconel X-750 spring-assisted mechanism, which engages a steam motive valve, turning the pump on or off as the float rises and falls. The all stainless steel design will ensure long life in the rather harsh environment of a steam pit.

The stainless steel sump ejector is designed to eliminate maintenance headaches and safety issues surrounding steam pits, tunnels and enclosed spaces.

Features

- All stainless steel construction and design guard against corrosion
- True steam-on, steam-off operation
- Heavy duty Inconel X-750 springs provide a long, trouble-free service life
- The small, compact and unique cast stainless steel design is unlike anything on the market today



For a fully detailed certified drawing, refer to list below.

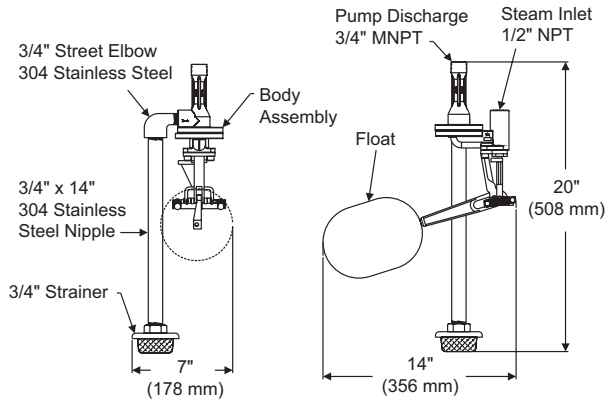
3/4" CDF #1052

1-1/2" CDF #1065

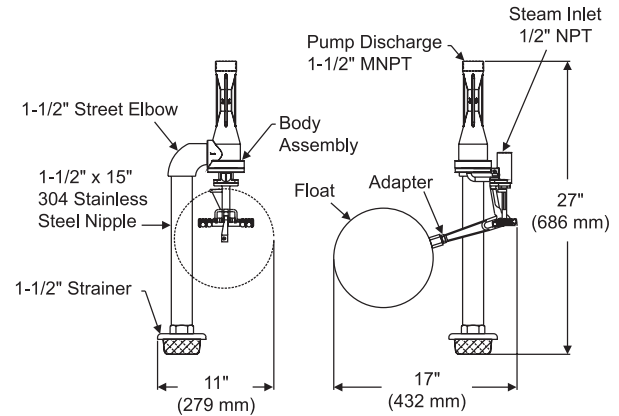
| Stainless Steel Sump Ejector Materials | |
|--|-----------------------|
| Name of Part | Material |
| Mechanism | ASTM A351 CF8M |
| Springs | Inconel X-750 |
| Spring Ends | 304 Stainless Steel |
| Clevis Pins | 304 Stainless Steel |
| Body | ASTM A351 CF8M |
| Nozzle | 308 Stainless Steel |
| Seal Retainer | 308 Stainless Steel |
| Motive Ball | 440-C Stainless Steel |
| Motive Valve | 316 Stainless Steel |
| Rod Seal | PTFE |
| Seal Spring | Hastelloy C-276 |
| Rod Wiper | Nitrile |
| O-Ring | EPDM |
| Bolts | 18-8 Stainless Steel |
| Strainer Body | Glass Filled Nylon |
| Strainer Mesh | Stainless Steel |
| Fittings | 304 Stainless Steel |
| Pipe | 304 Stainless Steel |



Stainless Steel Sump Ejector



3/4" Model



1-1/2" Model

3/4" Stainless Steel Sump Ejector Capacities in gallons per minute (gpm)

| Discharge Head (ft) | Water Temperature 60°F | | | | | | Water Temperature 100°F | | | | | | Water Temperature 140°F | | | | |
|---------------------|------------------------------|-----|------|------|------|------|------------------------------|-----|-----|-----|-----|-----|------------------------------|-----|-----|-----|-----|
| | Motive Steam Pressure (psig) | | | | | | Motive Steam Pressure (psig) | | | | | | Motive Steam Pressure (psig) | | | | |
| | 40 | 60 | 80 | 100 | 120 | 150 | 40 | 60 | 80 | 100 | 120 | 150 | 60 | 80 | 100 | 120 | 150 |
| 0 | 6.0 | 9.3 | 11.6 | 12.2 | 12.8 | 12.9 | 6.0 | 9.0 | 9.2 | 8.6 | 8.0 | 8.0 | 5.5 | 5.3 | 5.4 | 5.5 | 5.5 |
| 5 | 4.0 | 7.3 | 9.9 | 11.1 | 11.9 | 12.4 | 3.0 | 7.1 | 8.2 | 8.1 | 7.8 | 7.8 | 4.5 | 4.5 | 5.3 | 5.4 | 5.4 |
| 10 | 2.0 | 5.2 | 8.3 | 10.0 | 11.0 | 11.9 | — | 5.2 | 7.2 | 7.7 | 7.6 | 7.6 | 3.5 | 3.5 | 5.2 | 5.2 | 5.2 |
| 15 | — | 3.2 | 6.6 | 8.9 | 10.0 | 11.5 | — | 3.3 | 6.2 | 7.2 | 7.3 | 7.4 | — | — | 5.1 | 5.1 | 5.1 |
| 20 | — | — | 5.0 | 7.8 | 9.2 | 11.0 | — | — | 5.2 | 6.7 | 7.1 | 7.3 | — | — | 5.0 | 4.9 | 4.9 |
| 25 | — | — | — | 6.7 | 8.3 | 10.5 | — | — | — | 6.2 | 6.8 | 7.1 | — | — | 4.9 | 4.8 | 4.8 |
| 30 | — | — | — | 5.6 | 7.4 | 10.0 | — | — | — | 5.7 | 6.6 | 6.9 | — | — | 4.8 | 4.6 | 4.6 |
| 35 | — | — | — | — | 6.5 | 9.5 | — | — | — | — | 6.4 | 6.7 | — | — | — | 4.5 | 4.5 |
| 40 | — | — | — | — | 5.6 | 9.1 | — | — | — | — | 6.1 | 6.6 | — | — | — | 4.3 | 4.3 |
| 45 | — | — | — | — | — | 8.6 | — | — | — | — | — | 6.4 | — | — | — | — | 4.2 |
| 50 | — | — | — | — | — | 8.1 | — | — | — | — | — | 6.2 | — | — | — | — | 4.0 |

Note: Maximum operating pressure is 175 psig (12 bar). No increase in capacity with motive pressure over 150 psig (10 bar).

1-1/2" Stainless Steel Sump Ejector Capacities in gallons per minute (gpm)

| Discharge Head (ft) | Water Temperature 60°F | | | | | | Water Temperature 100°F | | | | | | Water Temperature 140°F | | | | | |
|---------------------|------------------------------|------|------|------|------|------|------------------------------|------|------|------|------|------|------------------------------|------|------|------|------|------|
| | Motive Steam Pressure (psig) | | | | | | Motive Steam Pressure (psig) | | | | | | Motive Steam Pressure (psig) | | | | | |
| | 60 | 80 | 100 | 120 | 150 | 175 | 60 | 80 | 100 | 120 | 150 | 175 | 60 | 80 | 100 | 120 | 150 | 175 |
| 5 | 23.0 | 34.0 | 42.2 | 48.4 | 56.8 | 55.8 | 23.2 | 34.1 | 42.2 | 49.9 | 55.3 | 56.0 | 26.3 | 36.1 | 46.3 | 46.2 | 41.1 | 41.0 |
| 10 | — | 28.4 | 38.0 | 43.2 | 51.0 | 51.2 | — | 28.9 | 37.2 | 44.5 | 52.1 | 54.8 | — | 28.9 | 38.2 | 43.5 | 41.1 | 40.9 |
| 15 | — | — | 35.0 | 37.9 | 46.5 | 50.4 | — | — | 31.3 | 39.3 | 48.9 | 53.1 | — | — | 30.7 | 38.1 | 41.1 | 40.9 |
| 20 | — | — | 26.1 | 33.5 | 44.4 | 49.5 | — | — | — | 35.0 | 44.7 | 51.4 | — | — | 23.6 | 33.4 | 41.2 | 40.8 |
| 25 | — | — | — | 29.0 | 39.5 | 48.0 | — | — | — | 30.9 | 40.3 | 47.2 | — | — | — | — | 41.4 | 40.5 |
| 30 | — | — | — | — | 35.2 | 43.5 | — | — | — | — | 36.5 | 43.9 | — | — | — | — | — | — |
| 35 | — | — | — | — | 31.1 | 38.8 | — | — | — | — | 32.3 | 39.1 | — | — | — | — | — | — |
| 40 | — | — | — | — | — | 34.3 | — | — | — | — | — | 35.7 | — | — | — | — | — | — |