

# SA-70

## LIQUID DRAINER

### GENERAL FEATURES

#### Working Temperature

The SA-70 allows the discharge of liquids from the gas and air lines. Fluid drain is happen with a float and the associated lever arm. The air or other gases in the device start to fill up in the liquid drainer body. The air and gases on the float allow the orifice to be closed by applying a downward force. The air and gases in the body cool down after a while and consequently start to condense. The resulting water implements a force in the upward direction to allow the float to open also the lever and its associated ball orifice. Thus, the water is discharged. When the air come again to it close the orifice. Sealing against air is ensured. This cycle continues automatically.

#### Connection

Threaded and flanged

#### BODY MATERIAL

##### Connection Type

Horizontal and vertical

##### Nominal Diameter:

DN15 (1/2") - DN25 (1")

##### Pressure:

Max. 25 bar

##### Working Temperature:

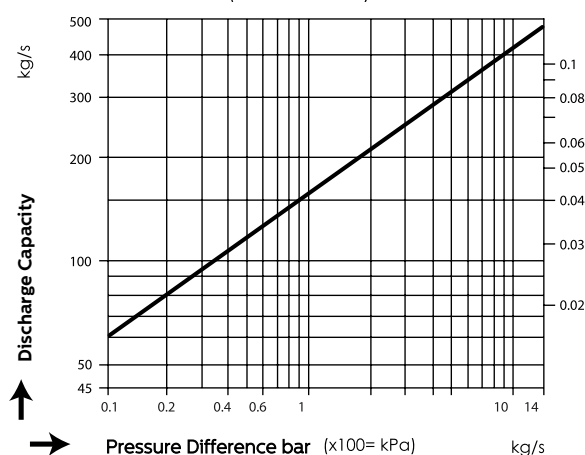
Max. 250 °C

##### Application:

- Compressors
- Heat exchangers
- Heating coils
- Air tanks
- Air separators
- Air pockets
- Air collectors
- Drying rollers

#### Discharge Capacity

(1/2" - 3/4" - 1")



## SA-70 LIQUID DRAINER

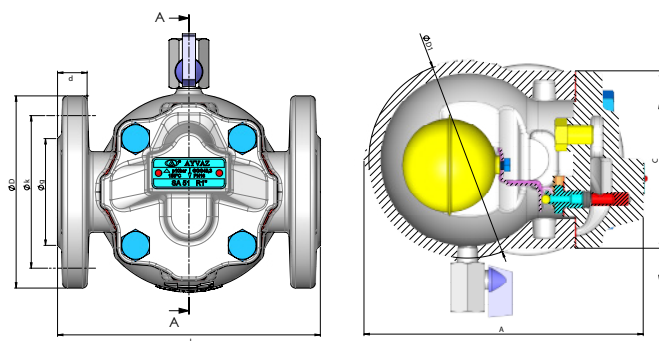
### Installation

The SA-70 can be installed horizontally and vertically. The pipeline must be sloped to maintain fluid flow. If there is a large amount of condensate (especially in air tanks) it can lock because the inside of the body will fill with a lot of fluid and will float above the float. As a result, a by-pass line must be made before the air line enters the liquid drainers. By-pass line must be done over the liquid drainers' body for horizontal installation.

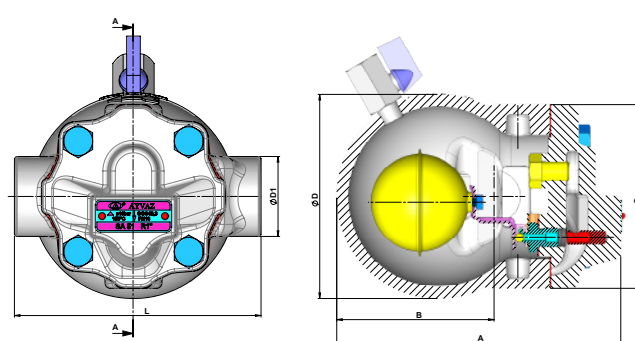
$\Delta p$  Max. Maximum differential pressure due to the density of the liquid

| DENSITY                             | 1       | 0,9 | 0,8 | 0,7 | min 0,6 |
|-------------------------------------|---------|-----|-----|-----|---------|
| $\Delta p$ Max. Pressure Difference | 14      | 14  | 14  | 9   | 5       |
| $\Delta p$ Min. Pressure Difference | 0,1 bar |     |     |     |         |

### FLANGED



### THREADED



| DIAMETERS |              |    |    |    |                        |       |      |     |     |     |             |
|-----------|--------------|----|----|----|------------------------|-------|------|-----|-----|-----|-------------|
| Dia.      | Flanged (mm) |    |    |    |                        |       |      |     |     |     |             |
|           | ØD           | Øk | Øg | b  | Holes' Dia. and number | A     | B    | C   | ØD1 | L   | Weight (kg) |
| DN 15     | 95           | 65 | 46 | 14 | Ø14x4                  | 152,5 | 81,5 | 105 | 98  | 150 | 4,6         |
| DN 20     | 105          | 75 | 56 | 16 | Ø14x4                  | 152,5 | 81,5 | 105 | 98  | 150 | 5,1         |
| DN 25     | 117          | 85 | 65 | 17 | Ø14x4                  | 170   | 99,5 | 108 | 120 | 160 | 6,6         |

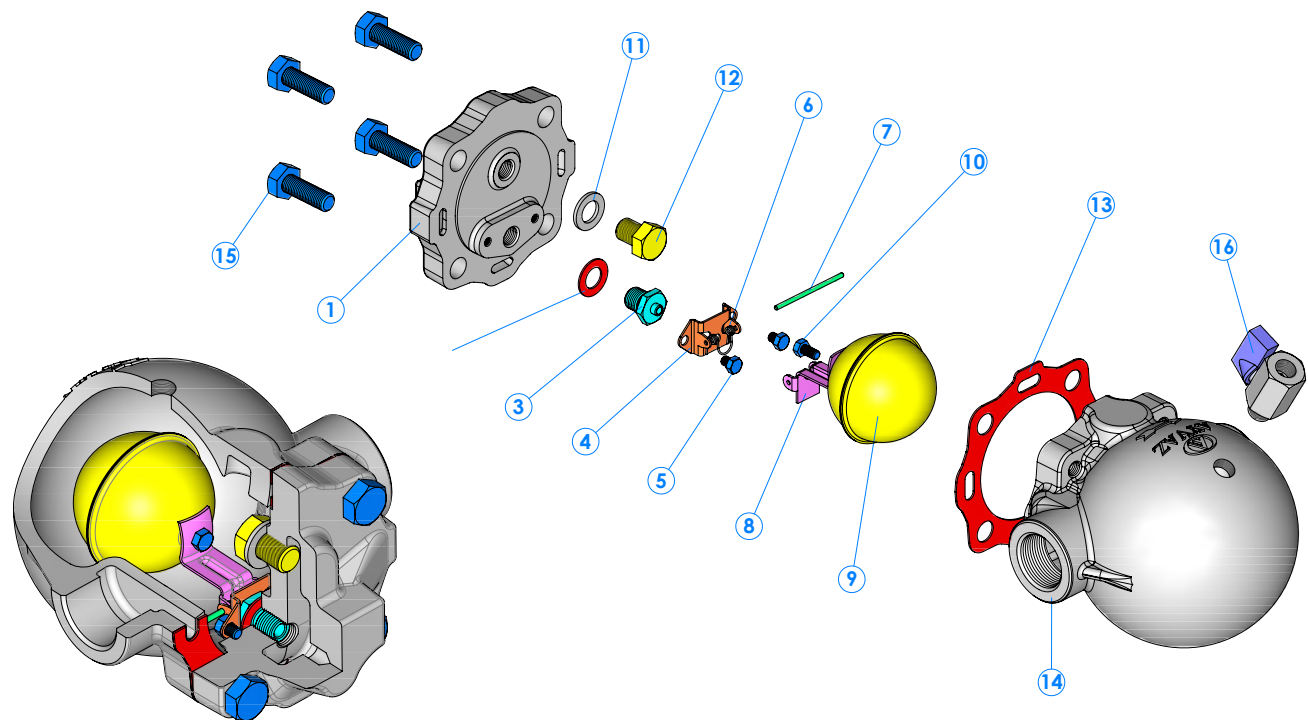
| Dia. | Threaded (mm) |      |     |     |     |     |             |
|------|---------------|------|-----|-----|-----|-----|-------------|
|      | A             | B    | C   | ØD  | ØD1 | L   | Weight (kg) |
| 1/2" | 150           | 81,5 | 108 | 98  | 40  | 122 | 3,5         |
| 3/4" | 150           | 81,5 | 108 | 98  | 40  | 122 | 3,5         |
| 1"   | 167           | 92,5 | 108 | 120 | 47  | 145 | 4,3         |

All measurements in the table are given in mm.

All technical arrangements and changes to be made in the production process are the property of Ayvaz.

# SA-70 LIQUID DRAINER

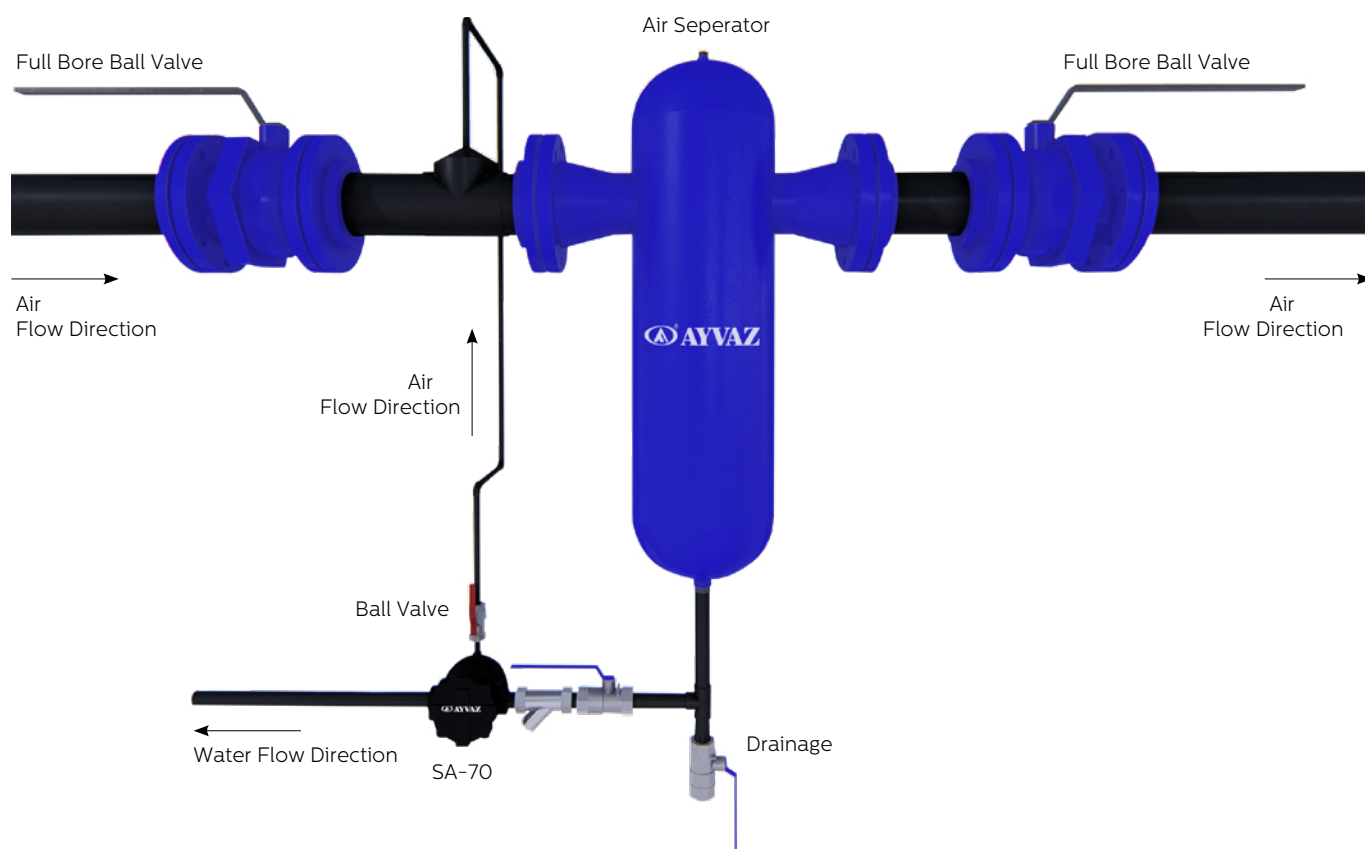
## PRODUCT STRUCTURE



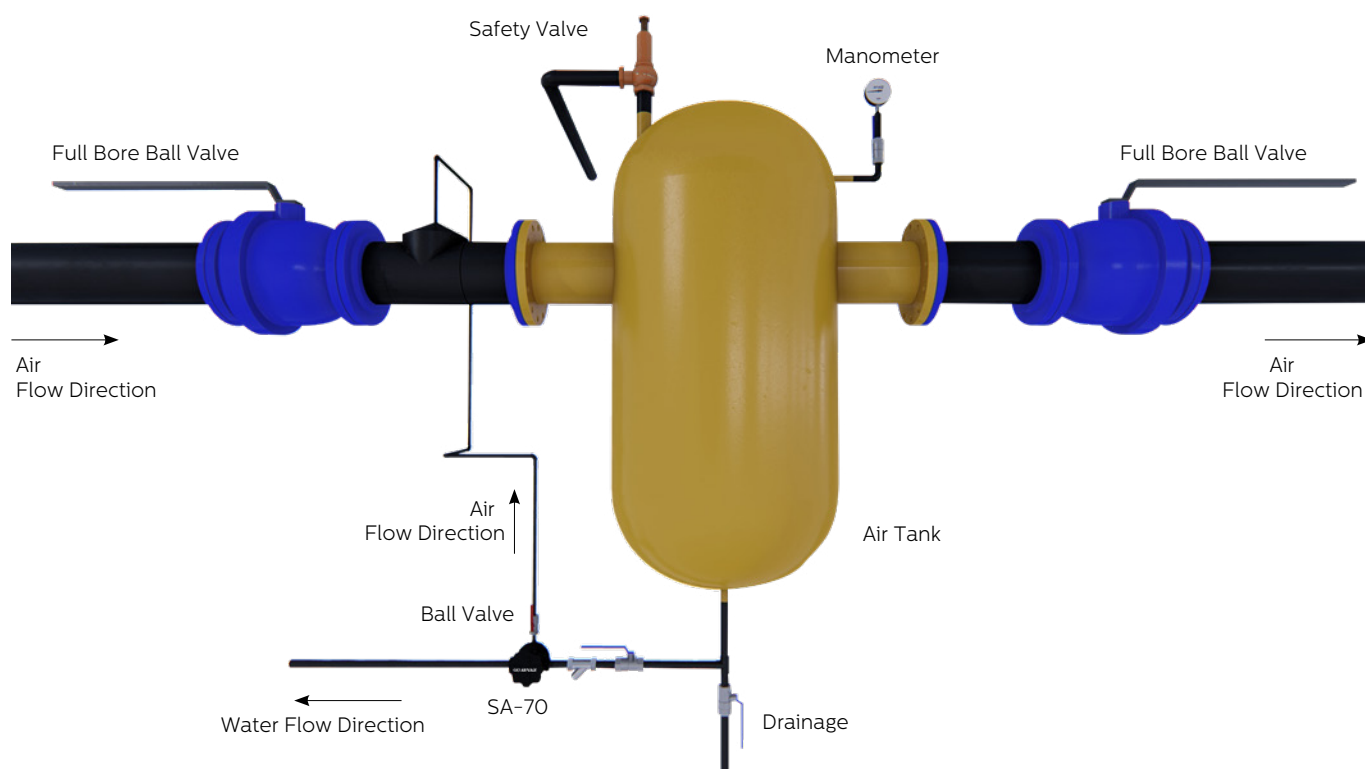
| PART LIST |                       |                     |
|-----------|-----------------------|---------------------|
| No        | PART NAME             | MATERIAL            |
| 1         | Body and Cover        | GSC25 Steel Casting |
| 2         | Seat Gasket           | Stainless Steel     |
| 3         | Float Seat            | Stainless Steel     |
| 4         | Float Handle Bearings | Stainless Steel     |
| 5         | Bolt A.K.B. M5        | Stainless Steel     |
| 6         | Spring                | Spring Steel        |
| 7         | Float Stem            | Stainless Steel     |
| 8         | Float Handle          | Stainless Steel     |
| 9         | Float                 | Stainless Steel     |
| 10        | Bolt A.K.B. M5        | Stainless Steel     |
| 11        | Washer                | Stainless Steel     |
| 12        | Bolt A.K.B. M12       | Stainless Steel     |
| 13        | Cover Gasket          | %94 Pure Graphite   |
| 14        | Body                  | Cast Iron           |
| 15        | Bolt A.K.B. M10       | 8.8                 |
| 16        | Ball Valve 1/4"       | Stainless Steel     |

## SA-70 LIQUID DRAINER

### AIR SAPERATOR APPLICATION SAMPLE

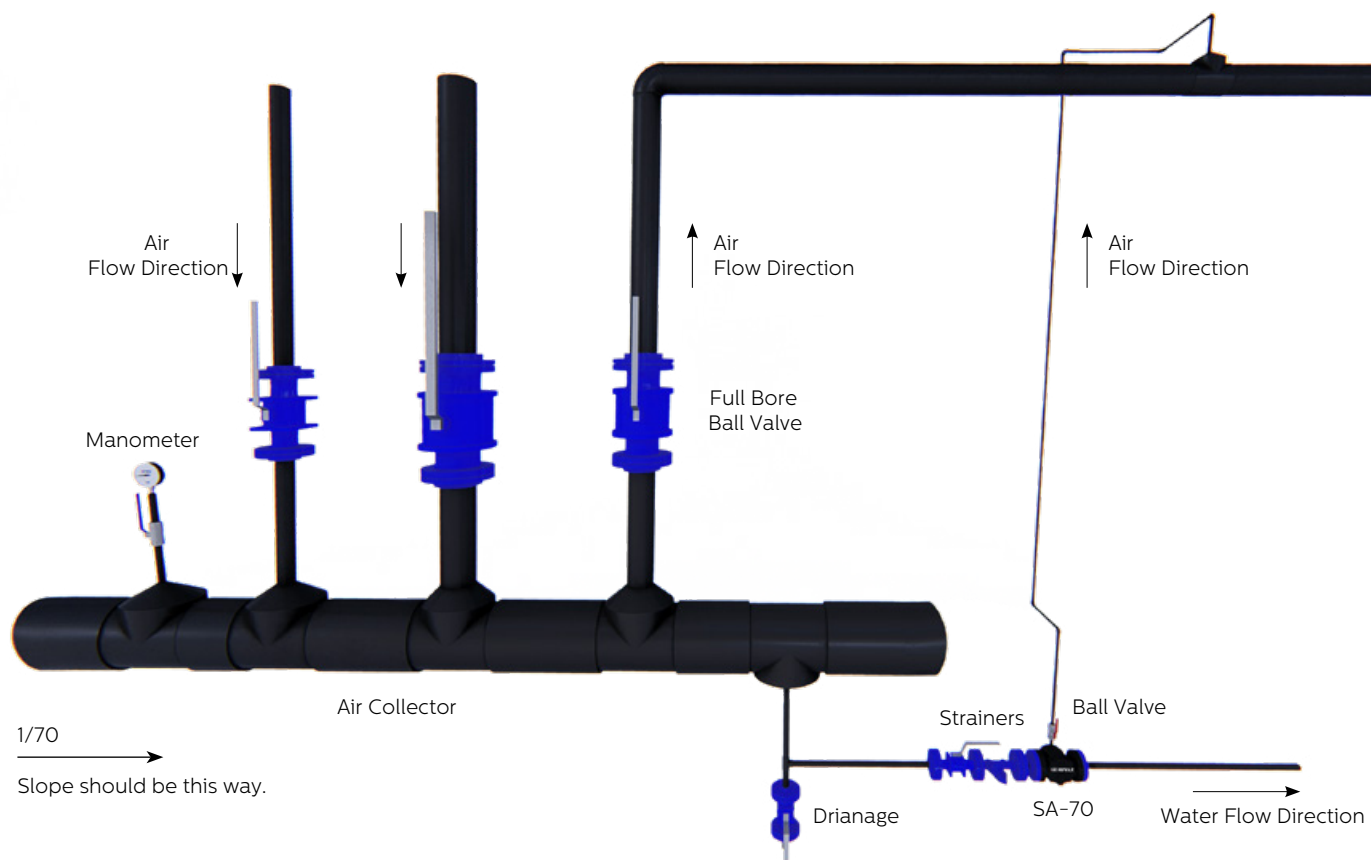


### AIR TANK APPLICATION SAMPLE

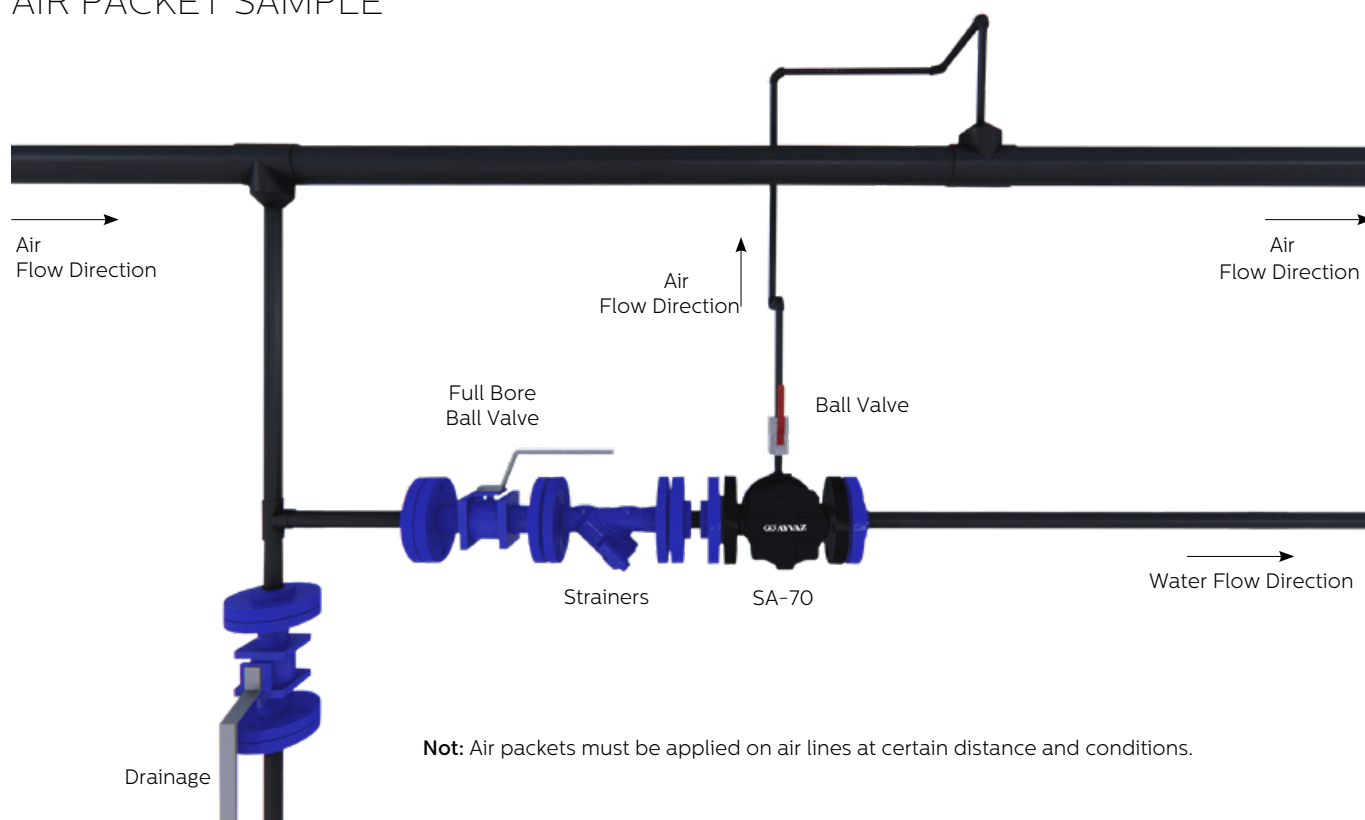


## SA-70 LIQUID DRAINER

### AIR COLLECTOR APPLICATION SAMPLE



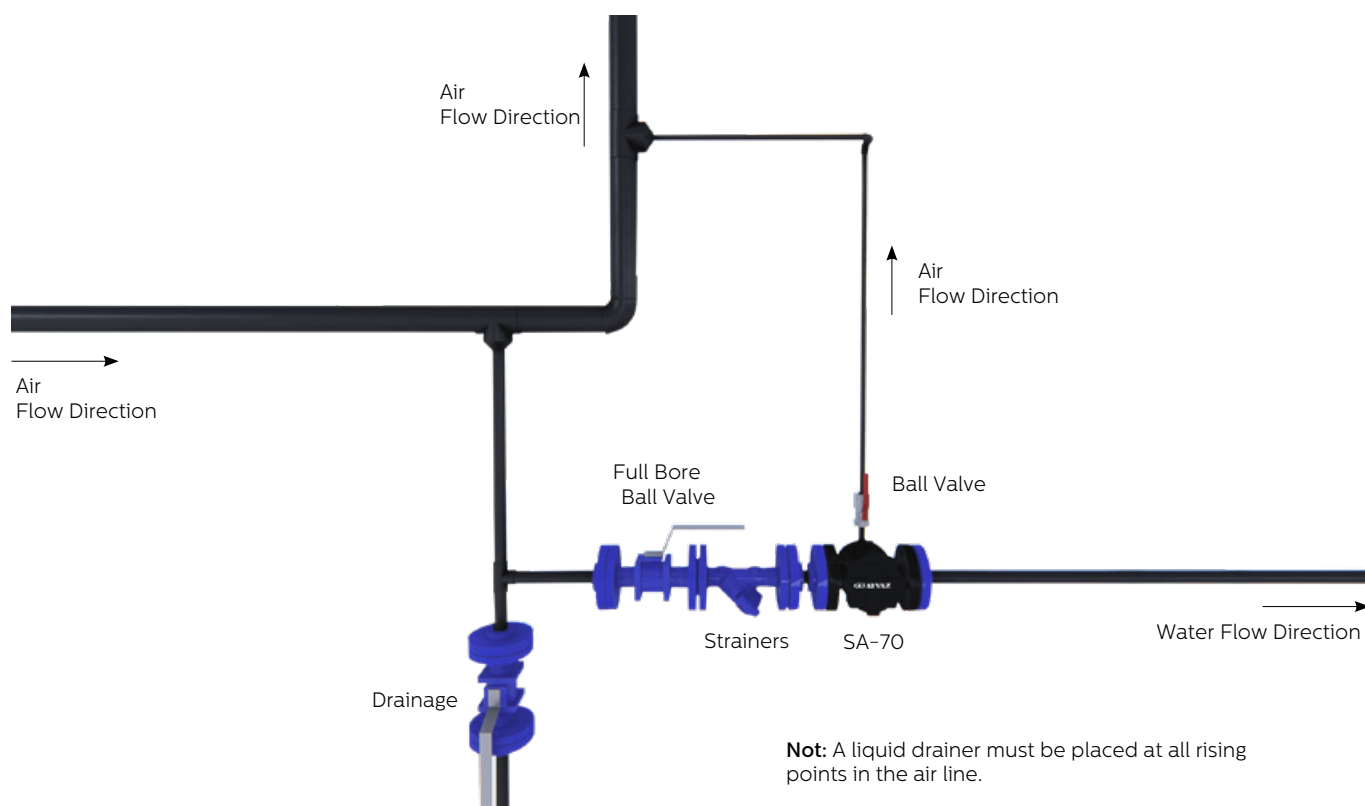
### AIR PACKET SAMPLE



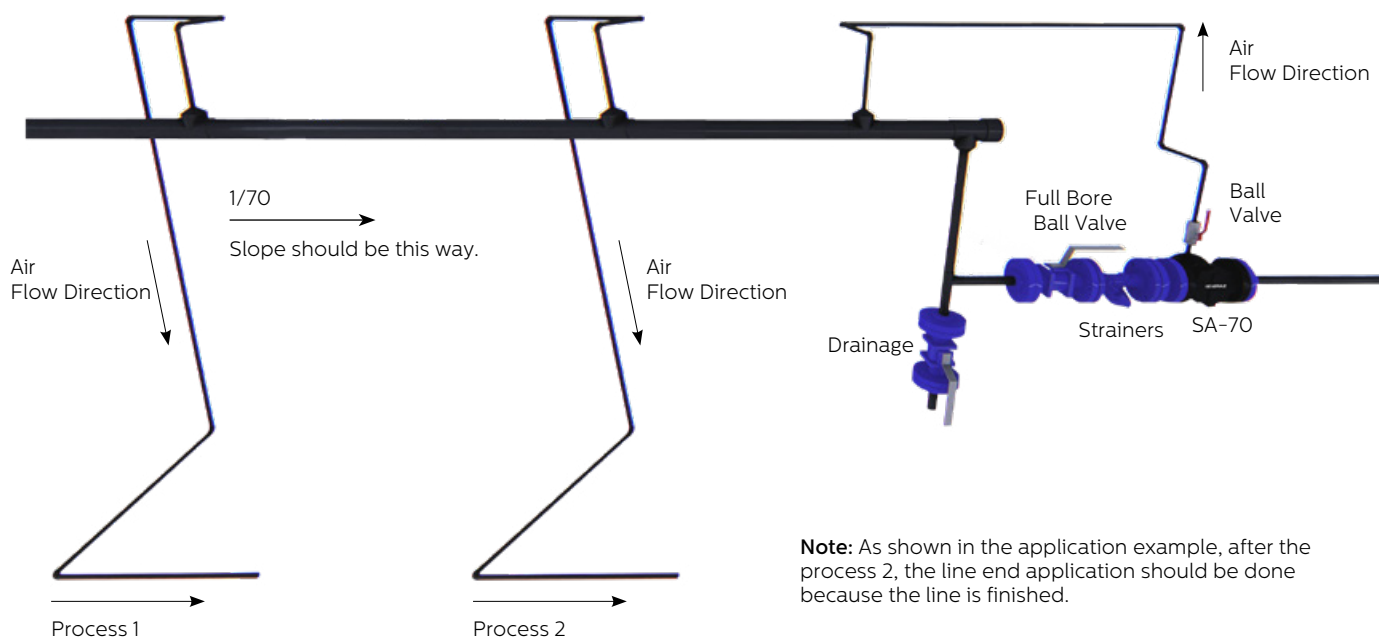
**Not:** Air packets must be applied on air lines at certain distance and conditions.

## SA-70 LIQUID DRAINER

### AIR PACKET SAMPLE-2



### END OF THE LINE APPLICATION



## SA-70 LIQUID ELIMINATORS/ FLOAT TYPE LIQUID DRAINERS



|  |  |   |  |  |  |
|--|--|---|--|--|--|
| <b>Cona</b><br><b>Caserta/Italy</b><br>Tel: +39 0823 187 3988<br>rmolaro@ayvaz.com                         | <b>Ayvaz Russia</b><br><b>Moscow/Russia</b><br>Tel: +74959951728<br>ayvazrus@ayvaz.com         | <b>Ayvaz Germany</b><br><b>Viernheim/Germany</b><br>Tel: +49 62046014399<br>germany@ayvaz.com                           | <b>Ayvaz Ukraine</b><br><b>Kiev/Ukraine</b><br>Tel: +380 44 390 57 57<br>info@ayvaz.com.ua | <b>Tricorr</b><br><b>Warsaw/Poland</b><br>Tel: +48-32-783-295-1<br>tricorr@tricorr.eu        | <b>Ayvaz Bakü</b><br><b>Bakü/Azerbaijan</b><br>Tel: +99(455) 579-84-32<br>ahayatov@ayvaz.com |
| <b>Haci Ayvaz M.E.</b><br><b>Dubai/U.A.E</b><br>Tel: +971 563550822<br>+971 501306871<br>mideast@ayvaz.com | <b>Ayvaz China</b><br><b>Cixi City/China</b><br>Tel: +86 0574 5897 3851<br>info@ayvazchina.com | <b>Ayvaz Kazakhstan LLP</b><br><b>Almaty/Kazakhstan</b><br>Tel: +7 (727) 327 97 57<br>info_kz@ayvaz.com<br>www.ayvaz.kz | <b>Ayvaz N</b><br><b>Isperih/Bulgaria</b><br>Tel: +359 8431 27 32<br>office@ayvaz-n.eu     | <b>Ayvaz Serbia</b><br><b>Belgrad/Serbia</b><br>Tel: +381 61 658 70 52<br>yakbiyik@ayvaz.com |  |