

# **DSH - DSV**

Strainer air separators

## Data sheet: DS/FD/0003/EN Ed. 03-2025

Isoil strainers air separators DS protect p.d. meters from damage due to foreign particles and at the same time they also eliminate air/gas in the fluid thus granting high accuracy in measurement.

## Working principle

When entering the air separator, the fluid flows through a basket which is made of a filtering mesh. In this way foreign particles in the fluid are held by the strainer and dropped on the bottom so that they can then be removed through the lower drain plug. Since the designing and assembling of measuring instruments must guarantee a high-level metrological standard, the strainer has been designed to convey eventual air into the gas-separator. The more air in the system, the more the floating-sphere sinks thus opening the air vent valve.

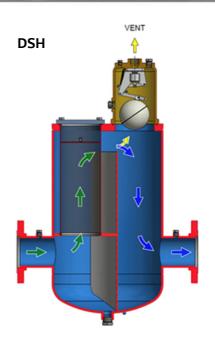
The opening of the air-separator activates a micro-switch. This in turn closes the automatic valve thus stopping product delivery.

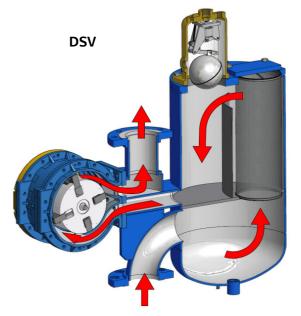
When all the air has been vented out, the rising level of fluid makes the sphere rise up again and the mechanism closes the air-strainer. Such movement activates the micro-switch again which opens the automatic valve allowing for product delivery.

#### Features

To choose the right filtering mesh, consider the fluid type. We suggest:

100 mesh for petrol, 60 mesh for diesel oil e 40 mesh for fuel oils.



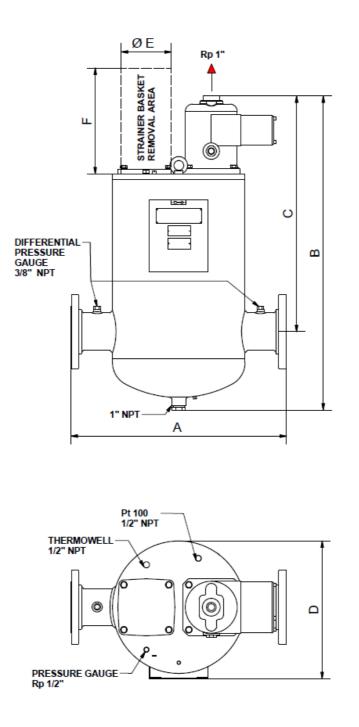




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### **Dimensions DSH**

Indicative dimensions in mm



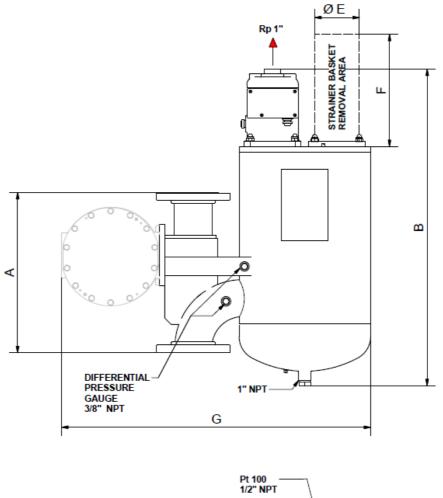
| VERSION | Α   | В    | С   | D   | Е   | F   | х              |
|---------|-----|------|-----|-----|-----|-----|----------------|
| DSH-80  | 660 | 960  | 710 | 425 | 150 | 407 | 3" ANSI 150 RF |
| DSH-100 | 660 | 960  | 710 | 425 | 150 | 407 | 4" ANSI 150 RF |
| DSH-150 | 760 | 1093 | 773 | 530 | 216 | 437 | 6" ANSI 150 RF |

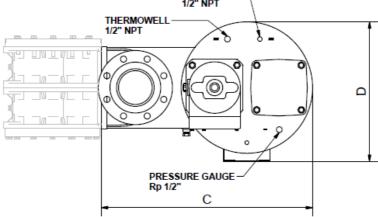


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#### **Dimensions DSV**

Indicative dimensions in mm





| VERSION | Α   | В    | С   | D   | E   | F   | G    | х              |
|---------|-----|------|-----|-----|-----|-----|------|----------------|
| DSV 200 | 385 | 960  | 635 | 420 | 150 | 407 | 960  | 3" ANSI 150 RF |
| DSV 400 | 495 | 980  | 650 | 430 | 150 | 407 | 960  | 4" ANSI 150 RF |
| DSV 600 | 650 | 1000 | 775 | 765 | 216 | 437 | 1150 | 6" ANSI 150 RF |



#### Accessories

#### Standard

- \* Thermowell
- \* Micro Ex-d on air vent valve

#### Upon request

- \* Differential pressure gauge with local indicator
- \* Differential pressure gauge with ATEX electrical contact
- \* Line pressure gauge
- \* Ball valve for drain 1"1/4
- \* Air vent ball valve 1"
- \* Temperature probe Pt 100

# Technical data

| Maximum operating pressure:                           | 1000 kPa  |
|---|---|
| Maximum differential pressure<br>with dirty strainer: | 150 kPa   |
| Standard working temperature:                         | -10° ÷50 °C<br>(non standars temperatures upon request) |

# Construction

| Flanges:         | ANSI 150 RF (other flanges upon request)   |  |  |  |
|------------------|--|--|--|--|
| Strainer body:   | Carbon steel (stainless steel upon request)  |  |  |  |
| Strainer basket: | Stainless steel  |  |  |  |
| Cap:             | Aluminum   |  |  |  |
| Air vent valve:  | Aluminum body<br>Anodized aluminum piston (stainless steel upon request)<br>Stainless steel sphere |  |  |  |

