

## **VENA® STEAMFLOW**

Ref: DO 03.10 FT 355 Rev. 03 Date: 12/06/2024



#### **APPLICATIONS**

The self-developed material in Vena® SteamFlow ensures high resistance to saturated steam in continuous flow applications in the food and pharma industries at high temperatures.

Its robust but flexible design makes this hose perfect for those applications where flexibility and good mechanical performance are needed. Abrasion resistant outer layer in Vena® SteamFlow guarantees good performance in most demanding applications.

#### **PROPERTIES**

- Odorless, tasteless, and completely non-toxic
- Smooth inner appearance. Black colored and smooth outer appearance
- Abrasion resistant outer layer
- Can be equipped with 316L stainless steel fittings on each end with roughness value of less than 0.8 μm (smaller roughness is possible on request)
- Operational temperature range from -40°C (-40 F) to +150°C (302 F)
- Standard manufacturing length is 6meters long (19.69 ft.)
- Compatible with CIP cleaning processes
- Capable of standing at least 1.000 hours of service at 130°C (1.7 bar) in 72 h cycles. Service hours may vary depending on the application, working conditions and connections.

#### **CONSTRUCTION**

This product is manufactured with inner cream-color food quality rubber and outer black rubber cover. Equipped with two plies of synthetic fabric reinforcements and metal wire spring. All encased inside the hose.



#### **REGULATIONS**

Rubber inner layer in accordance with:

- US FDA Standard 21 CFR 177.2600

This hose is in accordance with the RoHS Directive 2002/95/EC and its subsequent amendments including the RoHS2 Directive 2011/65/EU and RoHS3 Directive 2015/863



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#### **TECHNICAL SPECIFICATIONS**

| Inner Diameter |       | Wall Thickness  |                      | Working pressure<br>ISO 1402 |               | Bursting pressure<br>ISO 1402 |               | Bending radius<br>ISO 10619-1 |      |
|----------------|-------|-----------------|----------------------|------------------------------|---------------|-------------------------------|---------------|-------------------------------|------|
| mm             | inch  | +1.5/-1.5<br>mm | +0.06/ -0.06<br>inch | Bar at 23°C                  | Psi at 73,4°F | Bar at 23°C                   | Psi at 73,4°F | mm                            | inch |
| 10             | 3/8   | 6,5             | 0,26                 | 21,3                         | 308,9         | 63,9                          | 926,8         | 123,8                         | 4,9  |
| 13             | 1/2   | 6,5             | 0,26                 | 19,4                         | 281,4         | 58,2                          | 844,1         | 135,3                         | 5,3  |
| 16             | 5/8   | 6,5             | 0,26                 | 17,1                         | 247,5         | 51,2                          | 742,6         | 148,2                         | 5,8  |
| 19             | 3/4   | 6,5             | 0,26                 | 15,3                         | 221,4         | 45,8                          | 664,3         | 162,4                         | 6,4  |
| 25             | 1     | 6,5             | 0,26                 | 11,4                         | 165,3         | 34,2                          | 496,0         | 194,7                         | 7,7  |
| 32             | 1 1/4 | 6,5             | 0,26                 | 9,9                          | 143,1         | 29,6                          | 429,3         | 239,1                         | 9,4  |
| 38             | 1 1/2 | 6,5             | 0,26                 | 9,6                          | 139,7         | 28,9                          | 419,2         | 283                           | 11,1 |
| 50             | 2     | 6,5             | 0,26                 | 8,6                          | 124,7         | 25,8                          | 374,2         | 396                           | 15,6 |

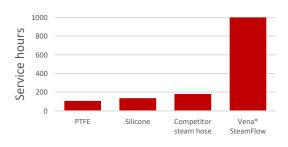
#### **CLEANING CONDITIONS**

|                | Vena® SteamFlow |
|----------------|-----------------|
| HOT WATER      | Up to 95°C      |
| CAUSTIC SODA   | Up to 3% - 80°C |
| NITRIC ACID    | Up to 1% - 23°C |
| PERACETIC ACID | Up to 1% - 23°C |

#### **ADDITIONAL INFORMATION**

Steam resistance comparison at continuous flow of saturated steam at 130°C (1,7 bar) in 72h cycles. After each cycle, optical inspection, and hydrostatic tests are carried out to check degradation of the hoses.

### STEAM RESISTANCE





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#### **LIMITATIONS**

Respect the bending radius and work pressure established values. High temperatures may affect the bursting and working pressure values

Extreme working conditions can attack the inner surface of the hose. It is advisable to inspect the inner appearance for cracks or swelling and replace the hose if necessary

Hose cover should be inspected over the entire length for signs of hardening, abrasion, cuts, kinking or crushing