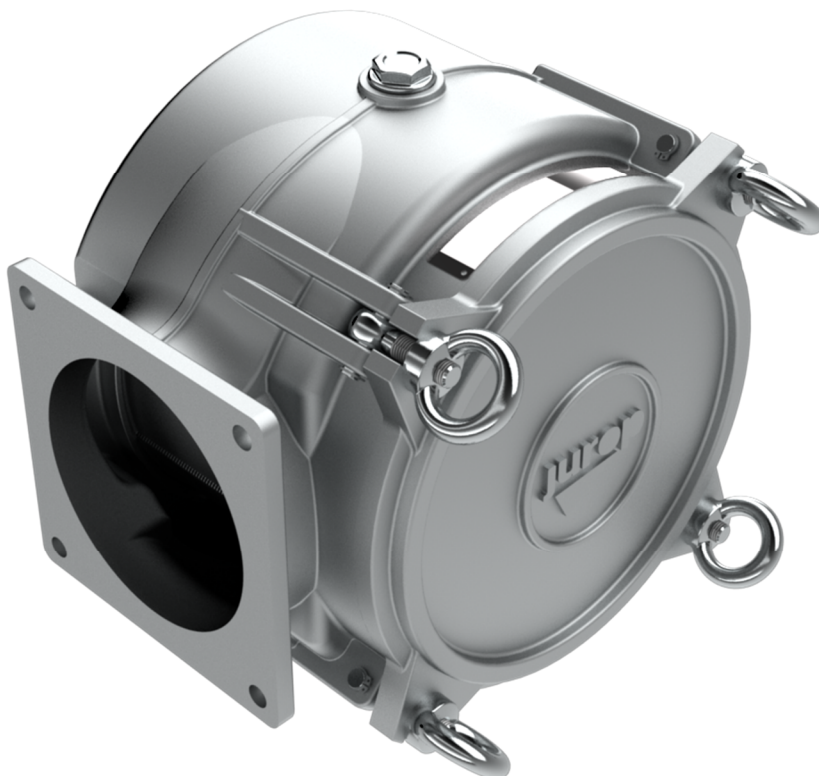


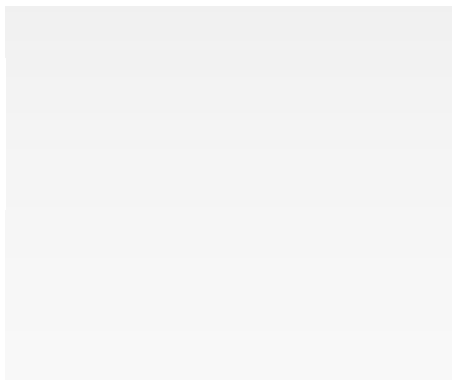
EN

FLAME ARRESTER DRF/F220 IIB



**ACCESSORIES AND  
COMPONENTS**

**Air filter and flame arrester**



COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =

COMPANY WITH  
ENVIRONMENTAL SYSTEM  
CERTIFIED BY DNV GL  
= ISO 14001 =

COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= UNI EN ISO 3834-2 =



**TECHNICAL DATA**

The bidirectional explosion-proof flame arrester DRF/F220 IIB is a protection system that prevents the propagation of flames (fire) from one element to the other separated by the flame arrester itself. The device connects two lines normally used for suction / pressurization of air and stops an eventual flame created or entered in the line itself.

The device flame arrester DRF/F220 IIB is suitable for fluids up to **Explosion group IIB**.

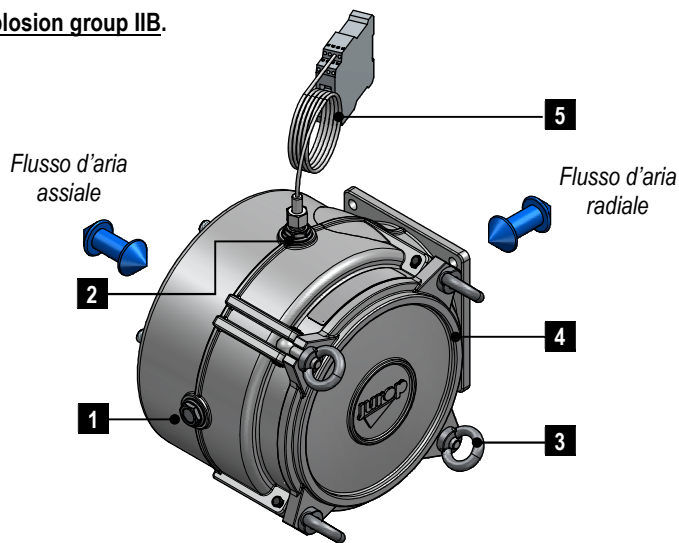
The flame arrester is available in two versions:

- **DRF/F220 IIB**, cod. 14450 048 E0, with mesh filter cartridge with filtering capacity of 200 µm;

Flame arrester DRF/F220 IIB features a Lu/D ratio of 10.92, maximum length L = 1638 mm and diameter Φi = 150 mm.

The filter body, the cover and the filtering cartridge are made of **Stainless steel 304**.

The following figure shows a schematic diagram of a flame arrester, highlighting its main components.



**LEGEND**

1	Filter-housing	4	Cover
2	Connection port / Port of draining of condensed vapors	5	ATEX certified thermostat (available on demand)
3	Locking eyebolt		

The following table shows the main operating parameters concerning the ratio Lu/D, max air-flow, condition of combustion test, maximum work-pressures, temperature (work-temperature, intervention temperature and thermostat adjusting), number of connection ports and weight.

**Operating parameters**

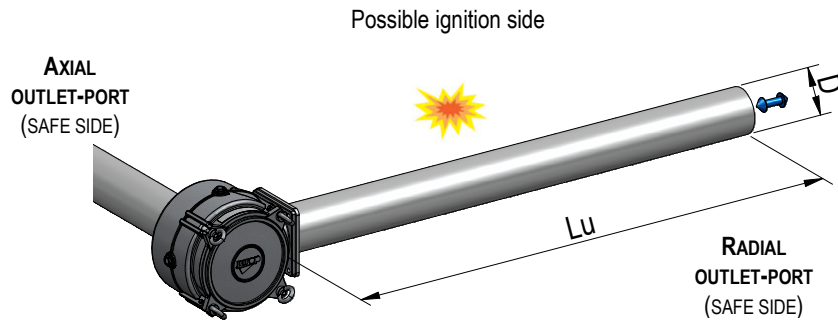
RATIO LU/D	≤ 10,92
MAX AIR FLOW	< 3600 m³/h
COMBUSTION TEST LENGTH 1 MIN. (BURN RATING)	b
COMBUSTION TIME: 1 MIN. (BURNING TIME T=1 MIN.)	max 30 sec.
MAXIMUM WORK-PRESSURE (BAR ABSOLUTE)	1,5 bar (0,15 MPa)
MAXIMUM WORK-TEMPERATURE	150 °C
THERMOSTAT ADJUSTING & INTERVENTION TEMPERATURE	150 °C
MAX ALLOWED ENVIRONMENT TEMPERATURE DURING OPERATION	-20 / +60°C
CONNECTION PORTS (FOR VENTING-LINE, DRAINING OF CONDENSED VAPORS AND TEMPERATURE MONITORING DEVICE)	3 da ¾ “
DEGREE OF FILTRATION	0,200mm (200 µm)
FILTER AREA	1041 cm²
WEIGHT	61 kg



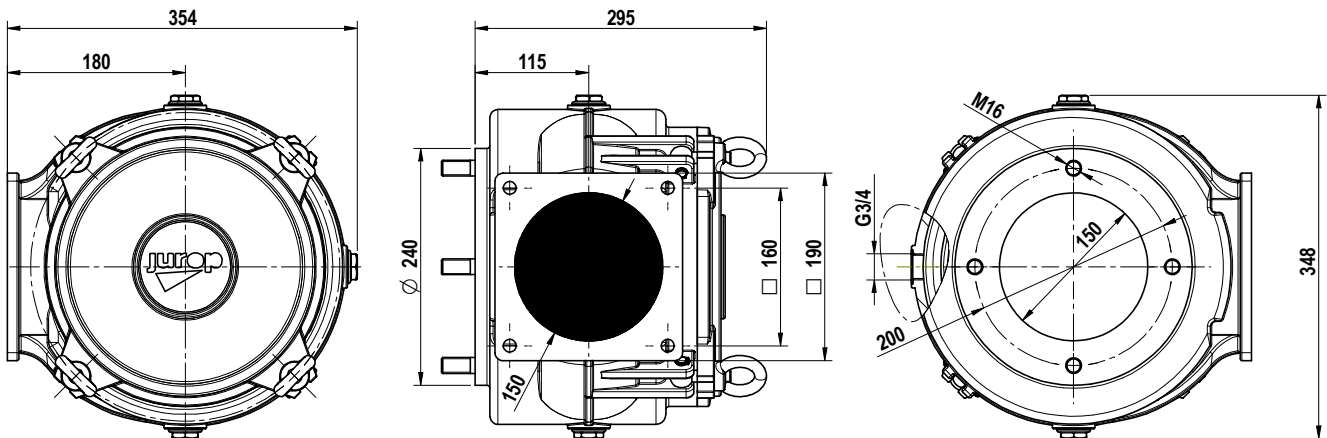
While positioning/mounting the flame arrester pay attention that / to:

- The flame arrester is bidirectional. Possible ignition side both at axial and radial outlet-port side;
- Mount close to the filtering net, on possible ignition side, an **ATEX certified thermostat** (2 probes in case of use as two-way flame arrester);
- In order to prevent possible sparks 'of mechanical origin use suitable cyclone type devices to stop large particles been sucked inside the line;
- Fit an effective earthing-line to discharge eventual static-electricity;
- Maintain the maximum allowed length of the piping (max distance from the pump) on the potential ignition side;
- Branching-out of the piping and valves on the potential spark/flame side have to be fitted as close as possible to the flame arrester;
- Depending of the use / working site the filter net may need a daily cleaning. The filter must therefore have an **easy access (it has not to be sealed off)**;
- It has to be possible to use one of the ports (dia.  $\frac{3}{4}$ "") for draining of eventual liquids. In case there are (fitted) valves, make sure that all elements are perfectly tight;
- Use PN6 piping on the potential ignition side.

In the drawing below one of possible state-of-the-art installations (for instance radial ignition).

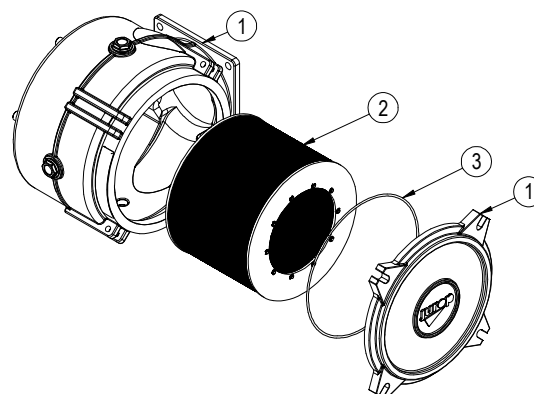


### Dimensions of flame arrester DRF/F220 IIB



**MATERIALS**

- 1. Filter-housing and lid made in **Stainless steel 304**.
- 2. The cartridge filter metal pack (and the mesh filter cartridge if present) are made of **Stainless steel 304**.
- 3. Inside sealing O-rings are made in **Viton**.



**MARKINGS ON THE SPARK ARRESTOR**

Name and address of the manufacturer: **Jurop S.p.A. via Crosera n°50, 33082 Azzano Decimo, Pordenone – Italy**  
 Type or Series designation: **DRF/F220 IIB**  
 Manufacturing number: **201001 (example)**  
 Certificate Number DRF/F220 IIB: **EPT 18 ATEX 3041 X**  
 Number of the Authority encharged and liable for the production control: **2460**  
 Applied Normative Number: **EN ISO 16852:2016**

Markings of the Flame arrester DRF/F220 IIB



- II G:** indicates the **group of the Protection System**, that's to say the environment of industrial use / application, mining sector/branche not included. Jurop's protection system is suitable to grant protection of working-sites where the eventual explosive atmosphere is formed by gasses/vapours or fogs, with exclusion of dusts;
- II B:** indicates the **gasses group**, where/whom the protection effectiveness and ATEX safety system has been demonstrated / proven.