

# FJM-WTO Oscillating Fog/Jet Monitor

#### **Description**

- FJM-WTO oscillating fog/jet monitors are manually operated fog/jet, water, and foam monitors with exceptional flow characteristics that optimize the throw range.
- FJM-WTO oscillating fog/jet monitors ensure an exceptional delivery of water or foam as a jet or as a spray pattern.
- The FJM-80 WTO, FJM-100 WTO, and FJM-150 WTO models are self-oscillating units with internal water driven turbines.
- The unique design of the FJM-WTO monitor and the stainless steel construction add to the relatively low weight of the unit.

## **Application**

- FJM-WTO monitors are designed for fixed mounting for the effective application of the wide flow range optimized jet range and spray patterns.
- The FJM-WTO monitor contains a loose flange to facilitate the mounting process and to enable adjustment for oscillating area sweep.

#### **Features**

- Wide flow range
- Adjustable flow
- Compact and balanced design
- Low weight
- Low friction bearings for easy manoeuvres
- Long throw length
- Adjustable stream pattern
- Stainless steel and bronze corrosion-resistant construction
- Manual override
- Slip-on inlet connection flange for direction adjustment
- ATEX compliant operation for zones 1 and 2

#### **Connections**

The foam/water inlet is flanged according to DIN PN 16 or ANSI 150 lb

#### **Optional components**

- Inbuilt inductor on all models (S version)
- Suction hose and valve

#### S models

The S model comes complete with inbuilt foam induction.



## **Listings and approvals**

- Det Norske Veritas (DNV)
- Bureau Veritas (BV)
- KFSD (Kuwait FJM-80 WTO)
- Russian Maritime Register of Shipping (RMRS)
- CNBOP (Poland) available upon request

#### **Ordering information**

When ordering, specify the following information:

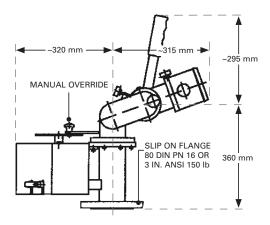
- Part number
- Type
- Flange type
- Capacity: flow and pressure (optional)
- Foam induction (S version)

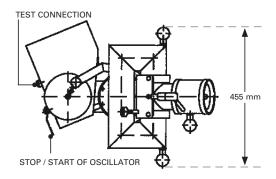
**Table 1: Ordering information** 

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Part No.	Description		
161508716	FJM-80 WTO DIN		
161508819	FJM-80 DIN ANSI		
161508737	FJM-80 S WTO DIN, excluding suction hose		
161508840	FJM-80 S WTO ANSI, excluding suction hose		
161008618	FJM-80 suction hose 1 1/4 in. 3 m		
161510811	FJM-100 WTO DIN/ANSI		
161510761	FJM-100 S WTO DIN/ANSI, excluding suction hose		
161010606	FJM-100 suction hose 2 in. 3 m		
161515719	FJM-150 WTO DIN/ANSI/JIS		
161015608	61015608 FJM-150 suction hose 2 in. 3 m		

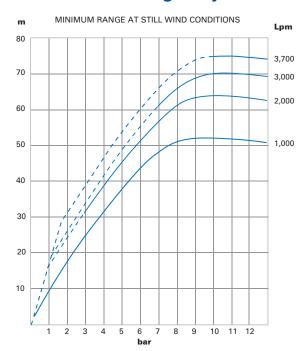


#### **FJM-80 WTO dimensions**





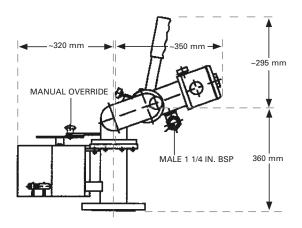
## FJM-80 monitor range of jet

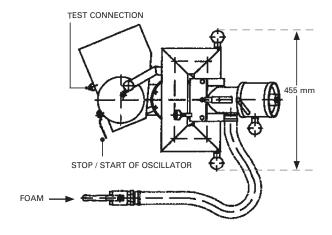


**Notes:** 1. Reaction force (N) = 0.233 x Q (Lpm)  $x \sqrt{p}$  (bar)

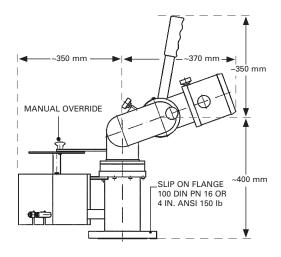
- 2. Deduct 10% for self-induction nozzles.
- 3. Achieving the values listed in the range of jet graph depends on the monitor's elevation angle. For further details, see the length-height relationship graph.

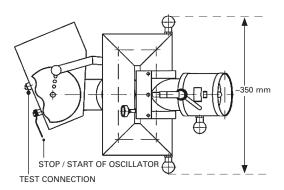
#### **FJM-80 WTO S dimensions**



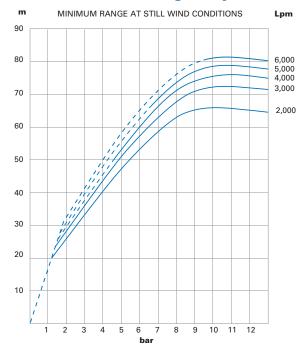


#### **FJM-100 WTO dimensions**





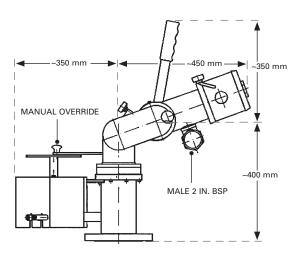
## FJM-100 monitor range of jet

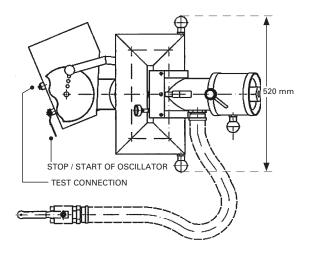


**Notes:** 1. Reaction force (N) = 0.233 x Q (Lpm) x  $\sqrt{p}$  (bar)

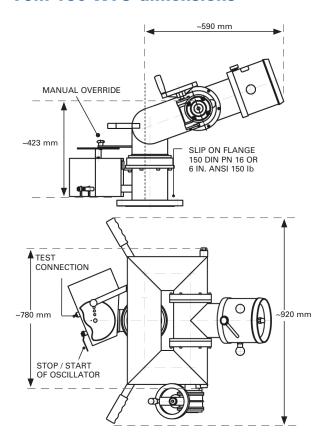
- 2. Deduct 10% for self-induction nozzles.
- 3. Achieving the values listed in the range of jet graph depends on the monitor's elevation angle. For further details, see the length-height relationship graph.

#### **FJM-100 WTO S dimensions**

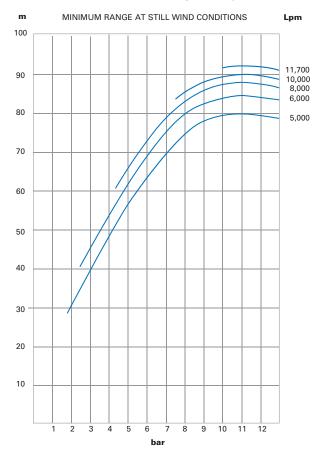




#### **FJM-150 WTO dimensions**



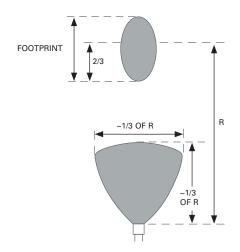
## FJM-150 monitor range of jet



**Notes:** 1. Reaction force (N) = 0.233 x Q (Lpm) x  $\sqrt{p}$  (bar)

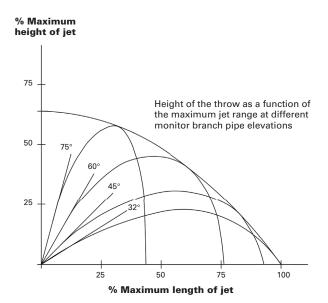
- 2. Deduct 10% for self-induction nozzles.
- 3. Achieving the values listed in the range of jet graph depends on the monitor's elevation angle. For further details, see the length-height relationship graph.

# Average fog pattern in still air



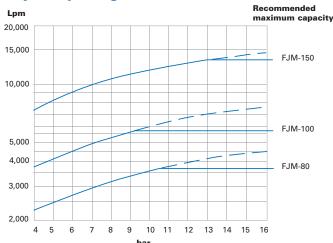
Note: R = Jet range

## Length and height relationship



**Note:** Reaction force (N) =  $0.233 \times Q$  (Lpm)  $\times \sqrt{p}$  (bar)

# **Capacity ranges**



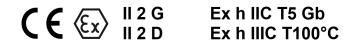
## **Performance data**

**Table 2: Performance data** 

FJM-WTO standard	FJM-80	FJM-100	FJM-150
Water capacity	Maximum 3,700 Lpm Minimum 500 Lpm	Maximum 6,000 Lpm Minimum 1,000 Lpm	Maximum 11,700 Lpm Minimum 3,000 Lpm
Design pressure	4 bar to 16 bar ATEX operation: 4 bar to 11 bar Optimum: 10 bar to 12 bar	4 bar to 16 bar ATEX operation: 4 bar to 11 bar Optimum: 10 bar to 12 bar	4 bar to 16 bar ATEX operation: 4 bar to 11 bar Optimum: 10 bar to 12 bar
Rotation - oscillation	30°, 50°, 70°, and 100°	30°, 50°, 70°, and 100°	30°, 50°, 70°, and 100°
Rotation - manual	360°	360°	360°
Elevation - manual	-60° / +90°	-60° / +90°	-60° / +90°
Weight	25 kg	32 kg	67 kg
Connection: water	80 DIN PN 16 or 3 in. ANSI 150 lb	100 DIN PN 16 or 4 in. ANSI 150 lb	150 DIN PN 16 or 6 in. ANSI 150 lb
Material: body	Stainless steel	Stainless steel	Stainless steel
Material: flange	Galvanized steel	Galvanized steel	Galvanized steel
Material: nozzle	Bronze	Bronze	Bronze

**Note:** Reaction force (N) =  $0.233 \times Q$  (Lpm)  $\times \sqrt{p}$  (bar).

# **ATEX and IECEx marking**



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