FJM-EL
Electric Monitor

Description
The SKUM FJM-EL Electric Monitor is a powerful fire suppression monitor with exceptional flow characteristics and remote control operation. The monitor’s electric motors drive elevation and rotation movements. The fog and jet pattern delivery adjustment is solenoid valve operated in the MV model and linear actuator operated in the LA model.

Application
The SKUM FJM-EL Electric Monitor is designed for fixed mounting and optimized to deliver water and foam. The varying water to fog pattern delivery is adjustable by remote control.

Features
- Wide capacity range
- Adjustable flow to nominal capacity
- Compact and balanced design
- Easily manoeuvred because of low friction bearings
- Long throw length
- Adjustable stream pattern
- Corrosion resistant construction of stainless steel and bronze
- Integrated electrical junction box
- Available with ATEX approved electrical equipment

Connections
- Foam and water inlet: Flanged according to DIN PN 16, JIS 10 K or ANSI 150 lb

Optional Components
The following components are available upon request:
- Standard control cabinet and operating panel
- Custom built solutions and control cabinet
- Power supply from 24 VDC to 440 VAC
- Harsh environment cast iron motors and gearboxes
- S-version inbuilt inductor is available for most models
- Optional suction hose and valve available for the S-versions

Listings and Approvals
- Det Norske Veritas (DNV)
- Bureau Veritas (BV) FJM-200 EL only
- Russian Maritime Register of Shipping (RMRS)
- CNBOP (Poland) FJM-100 EL only

Capacity Ranges

<p>|</p>
<table>
<thead>
<tr>
<th>FJM-200*</th>
<th>FJM-150*</th>
<th>FJM-100*</th>
<th>FJM-80*</th>
</tr>
</thead>
<tbody>
<tr>
<td>30,000</td>
<td>20,000</td>
<td>15,000</td>
<td>10,000</td>
</tr>
<tr>
<td>20,000</td>
<td>15,000</td>
<td>10,000</td>
<td>5,000</td>
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<tr>
<td>15,000</td>
<td>10,000</td>
<td>5,000</td>
<td>1,000</td>
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<tr>
<td>10,000</td>
<td>5,000</td>
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<td>500</td>
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<td>5,000</td>
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<tr>
<td>1,000</td>
<td>500</td>
<td>450</td>
<td>400</td>
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<tr>
<td>500</td>
<td>450</td>
<td>400</td>
<td>350</td>
</tr>
</tbody>
</table>

BAR

Lpm

Tyco Park | Grimshaw Lane | Newton Heath | Manchester | M40 2WL | Tel: +44 (0) 161 259 4000 | www.skum.com
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Ordering Information

When ordering the SKUM FJM-EL, specify the following information:

- Part number
- Type
- Flange type
- Flow and pressure capacity
- Motor and solenoid voltage
- S-version foam induction
- Type of control cabinet and panel

### Standard Environment Part Number

<table>
<thead>
<tr>
<th>Description</th>
<th>Harsh Environment Part Number</th>
<th>Description</th>
</tr>
</thead>
</table>

#### FJM-80 EL LA - Linear Actuator Model

- 161508107 – FJM-80 EL LA DIN/ANSI
- 161508108 – FJM-80 EL LA POS DIN/ANSI
- 168211118 – Standard junction box and protection hose assembly

#### FJM-100 EL LA - Linear Actuator Model

- 161550112 – 16155011216150112 - FJM-100 EL LA DIN
- 161550117 – 16155011716150117 - FJM-100 EL LA ANSI
- 161550559 – 16155055916150559 - FJM-100 EL LA Exde DIN
- 161550566 – 16155056616150566 - FJM-100 EL LA Exde ANSI
- 163450169 – 163450169163450169 - FJM-100 EL LA CI DIN with motors
- 163650172 – 163650172163650172 - FJM-100 EL LA CI Exde DIN with motors

#### FJM-150 EL LA - Linear Actuator Model

- 161555125 – 161555125161555125 - FJM-150 EL LA DIN ANSI JIS
- 161555566 – 16155556616155566 - FJM-150 EL LA Exde ANSI JIS
- 163455156 – 163455156163455156 - FJM-150 EL LA CI DIN with motors
- 163655158 – 163655158163655158 - FJM-150 EL LA Exde DIN with motors

#### FJM-100 EL MV

- 161510112 – 161510112161510112 - FJM-100 EL MV DIN
- 161510188 – 161510188161510188 - FJM-100 EL MV POS DIN
- 161510209 – 161510209161510209 - FJM-100 EL MV ANSI
- 161510126 – 161510126161510126 - FJM-100 EL S MV DIN
- 161510223 – 161510223161510223 - FJM-100 EL S MV ANSI
- 161510552 – 161510552161510552 - FJM-100 EL MV Exde DIN
- 161510650 – 161510650161510650 - FJM-100 EL MV Exde ANSI

#### FJM-150 EL MV

- 161515118 – 161515118161515118 - FJM-150 EL MV DIN/ANSI/JIS
- 161515517 – 161515517161515517 - FJM-150 EL MV Exde DIN/ANSI
- 16345147 – 1634514716345147 - FJM-150 EL S MV DIN/ANSI/JIS

#### FJM-200 EL MV

- 161520115 – 161520115161520115 - FJM-200 EL MV DIN
- 161520216 – 161520216161520216 - FJM-200 EL MV ANSI
- 161010606 – 161010606161010606 - FJM-100 suction hose 2 in. 3 m
- 161015608 – 161015608161015608 - FJM-150 suction hose 2 in. 3 m

#### FJM-80 Jet Range

- Note: Not supplied with a terminal box or cable protection hose.

#### FJM-80 EL LA

- Note: Not supplied with a junction box and cable protection hose.

### Notes:

1. Not supplied with a terminal box or cable protection hose. Order separately (Part No. 168211118)
2. Excludes a suction hose
3. Complete with 24 VDC motors
4. Complete with motors
   - 3 x 220-254/380-440 V 50 Hz, 3 phase, IP56
   - 3 x 220-277/386-480 V 60 Hz, 3 phase, IP56
   - Linear motor 230 VAC
5. Complete with motors EExd
   - 3 x 230/400 V, 50 Hz, 3 phase, IP56
   - Linear motor 24 VAC
6. 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 EL

- Control Unit
- Joystick

Dimensions:
- Height: 430 mm
- Width: 700 mm
- Length: 208 mm

Input Voltage Supply is Customer Specified

FJM-100 EL LA

- Control Unit
- Joystick

Dimensions:
- Height: 568 mm
- Width: 587 mm
- Length: 180 mm

Input Voltage Supply is Customer Specified

FJM-100 Jet Range

Minimum Range at Still Wind Conditions

Note:
1. Deduct 10% for self induction nozzle.
2. Reaction force (N) = 0.233 \times (\text{Lpm}) \times \sqrt{p} \text{ (bar)}.
3. Achieving the values in the range of jet graph depends on the monitor’s elevation angle. See the length-height relationship graph.

FJM-150 EL

- Control Unit
- Joystick

Dimensions:
- Height: 590 mm
- Width: 810 mm
- Length: 264 mm

Input Voltage Supply is Customer Specified

FJM-150 EL LA

- Control Unit
- Joystick

Dimensions:
- Height: 636 mm
- Width: 828 mm
- Length: 202 mm

Input Voltage Supply is Customer Specified

FJM-150 Jet Range

Minimum Range at Still Wind Conditions

Note: Achieving the values in the range of jet graph depends on the monitor’s elevation angle. See the length-height relationship graph.
Performance Data

<table>
<thead>
<tr>
<th>FJM series standard</th>
<th>FJM-80</th>
<th>FJM-100</th>
<th>FJM-150</th>
<th>FJM-200</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water capacity</strong></td>
<td>Maximum</td>
<td>2,500 Lpm</td>
<td>6,000 Lpm</td>
<td>11,700 Lpm</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>500 Lpm</td>
<td>1,000 Lpm</td>
<td>3,000 Lpm</td>
</tr>
<tr>
<td><strong>Design pressure</strong></td>
<td>4 – 16 bar</td>
<td>4 – 16 bar</td>
<td>4 – 16 bar</td>
<td>4 – 13 bar</td>
</tr>
<tr>
<td></td>
<td>Optimum 10 – 12 bar</td>
<td>Optimum 10 – 12 bar</td>
<td>Optimum 10 – 12 bar</td>
<td>Optimum 10 – 12 bar</td>
</tr>
<tr>
<td><strong>Rotation</strong></td>
<td>±175°</td>
<td>±175°</td>
<td>±175°</td>
<td>±175°</td>
</tr>
<tr>
<td><strong>Elevation</strong></td>
<td>−65° or +70°</td>
<td>−70° or +70°</td>
<td>−70° or +70°</td>
<td>−60° or +70°</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>28.5 kg</td>
<td>69 kg</td>
<td>98 kg</td>
<td>139 kg</td>
</tr>
</tbody>
</table>

FJM series inbuilt inductor

<table>
<thead>
<tr>
<th>FJM-100 S</th>
<th>FJM-150 S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum water capacity</strong></td>
<td>6,000 Lpm</td>
</tr>
<tr>
<td><strong>Minimum water capacity</strong></td>
<td>1,000 Lpm</td>
</tr>
<tr>
<td><strong>Design pressure</strong></td>
<td>4 – 16 bar</td>
</tr>
<tr>
<td></td>
<td>Optimum 10 – 12 bar</td>
</tr>
<tr>
<td><strong>Maximum foam capacity</strong></td>
<td>320 Lpm</td>
</tr>
<tr>
<td><strong>Rotation</strong></td>
<td>±178°</td>
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<tr>
<td><strong>Elevation</strong></td>
<td>−45° or +70°</td>
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<tr>
<td><strong>Suction connection</strong></td>
<td>2 in. BSP male</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>72 kg</td>
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</tbody>
</table>
**Length - Height Relationship**

Reaction force (N) = 0.233 x Q (Lpm) x √p (bar)

**Note:** The converted values in this document are provided for dimensional reference only and do not reflect an actual measurement. SKUM and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.

**Average Fog/Jet Pattern in Still Air**

**Note:** 1. This diagram is for all FJM Monitors.
   2. R = Jet range.