Foamax®
Fire fighting systems & equipment

Product name	**FJM EL**
Description	**Electric monitor**
Manufacturer	**SKUM**
Revision	**1.0/2024**

ASK ABOUT THE PRODUCT

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 movemelnts. 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

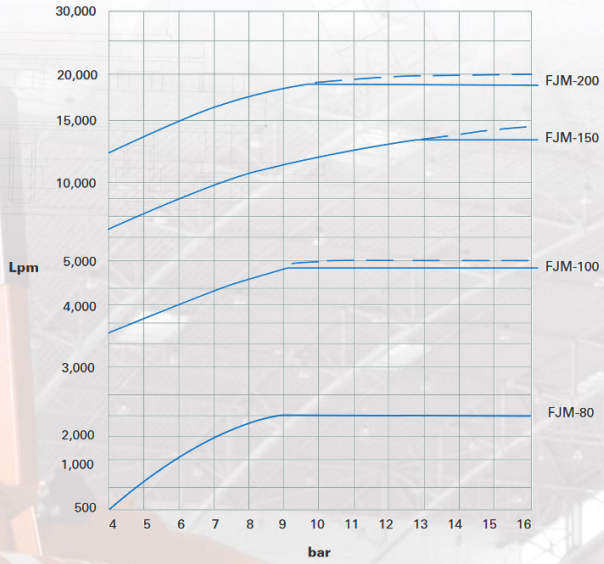
Optional Components

- 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

Certificates, Listings and Approvals

- **National Assessment and Verification of Constancy of Performance CNBOP-PIB No 063-UWB-0033** (FJM-80; FJM-100) - revision 2 (PN-EN 13565-1:2019-09)
- **National Assessment and Verification of Constancy of Performance CNBOP-PIB No 063-UWB-0243** (FJM-150) - revision 2 (PN-EN 13565-1:2019-09)
- **Det Norske Veritas** (DNV)
- **Bureau Veritas** (BV), FJM-200 only
- **Russian Maritime Register of Shipping** (RMRS)

Capacity Ranges



Ordering Information

Przy składaniu zamówienia należy podać następujące informacje

- Part number (Table 1)
- Type
- Flange type
- Flow and pressure capacity
- Motor and solenoid voltage
- S- version foam inductor
- Type of control cabinet and panel

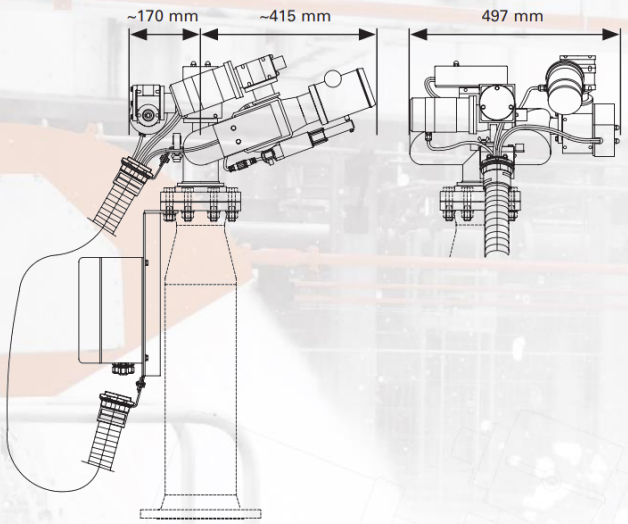
Table 1: Ordering details		
Standard Environment Part Number	Harsh Environment CI Model Part Number	Description
FJM-80 EL LA - Linear Actuator Model		
161508107	-	FJM-80 EL LA DIN ANSI [1,3]
161508108	-	FJM-80 EL LA POS DIN ANSI [3]
168211118	-	Standard junction box and protection hose assembly
FJM-100 EL LA - Linear Actuator Model		
161550112	163450155	FJM-100 EL LA DIN
161550121	-	FJM-100 EL LA POS DIN
161550117	163450162	FJM-100 EL LA ANSI
161550559	163650158	FJM-100 EL LA Exde DIN
161550566	163650165	FJM-100 EL LA Exde ANSI
-	163450169	FJM-100 EL LA CI DIN with motors[4]
-	163650172	FJM-100 EL LA CI Exde din with motors[5]
FJM-150 EL LA - Linear Actuator Model		
161555125	163455149	FJM-150 EL LA DIN ANSI JIS
161555566	163655151	FJM-150 EL LA Exde DIN ANSI JIS
-	163455156	FJM-150 EL LA DIN ANSI JIS with motors[4]
-	163655158	FJM-150 EL LA Exde DIN ANSI JIS with motors[5]
FJM-100 EL MV		
161510112	163410148	FJM-100 EL MV DIN
161510188	-	FJM-100 EL MV POS DIN
161510209	163410247	FJM-100 EL MV ANSI
161510126	163410153	FJM-100 EL S MV DIN [2]
161510223	163410252	FJM-100 EL S MV ANSI [2]
161510552	163610151	FJM-100 EL MV Exde DIN
161510650	163610253	FJM-100 EL MV Exde ANSI
FJM-150 EL MV		
161515118	163415142	FJM-150 EL MV DIN ANSI JIS
161515517	163515145	FJM-150 EL MV Exde DIN ANSI
-	16345147	FJM-150 EL S MV DIN ANSI JIS
FJM-200 EL MV		
161520115	163420144	FJM-200 EL MV DIN
161520216	163420243	FJM-200 EL MV ANSI
OPTIONAL		
161010606	-	FJM-100 suction hose 2”, 3m
161015608	-	FJM-150 suction hose 2”, 3m

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. 6Achieving 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.

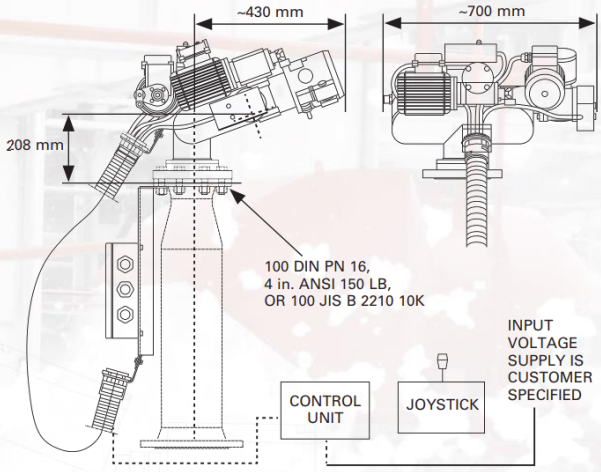
Foamax®
Fire fighting systems & equipment

FJM 80 EL LA

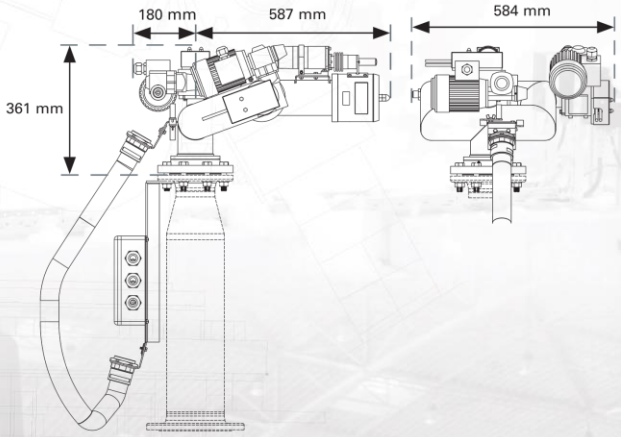


Note: Not supplied with a junction box and cable protection hose.

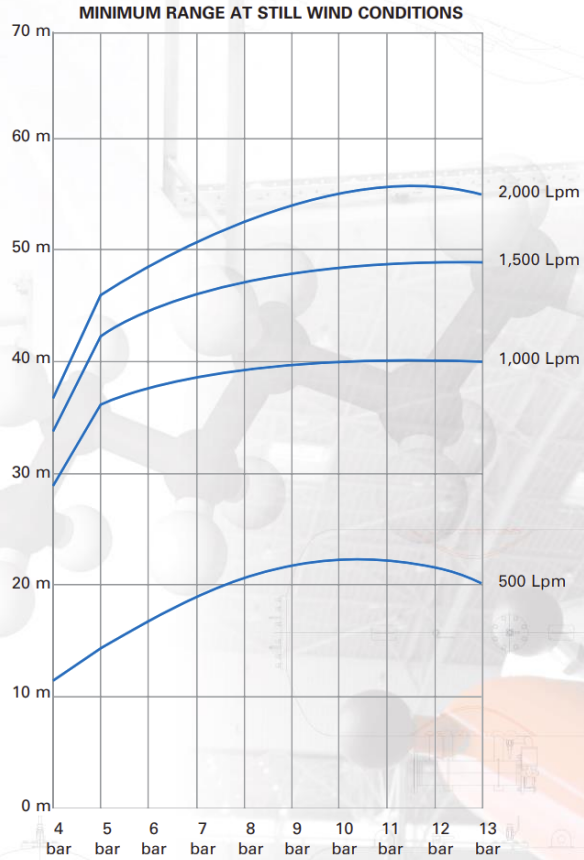
FJM 100 EL MV



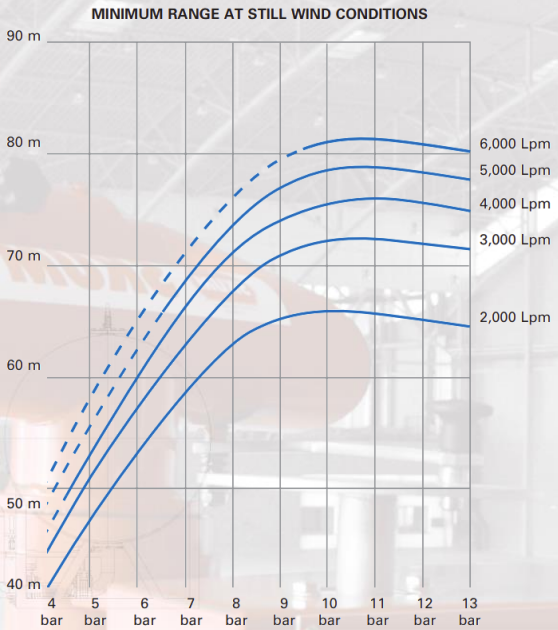
FJM 100 EL LA



FJM-80 Jet Range

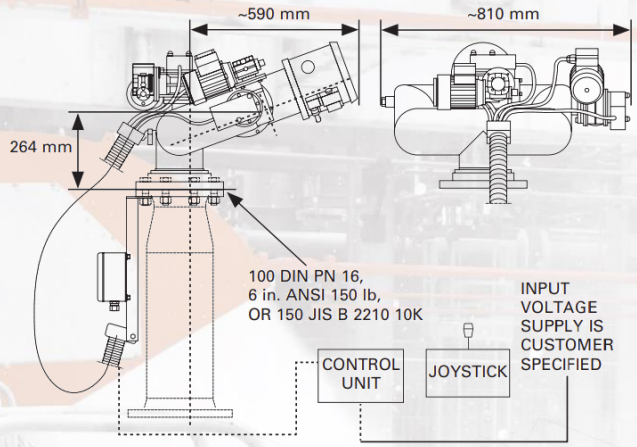


FJM-100 Jet Range

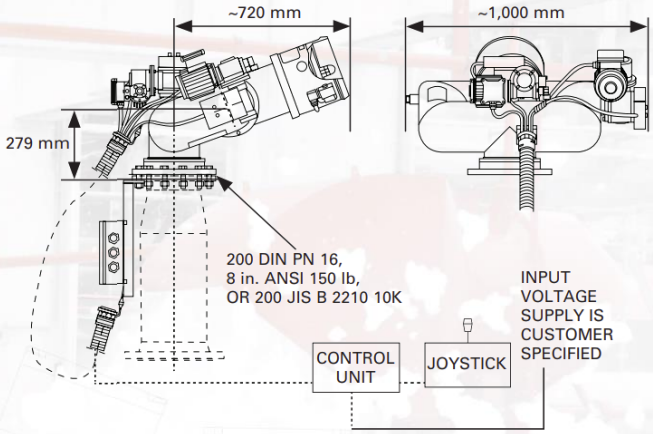


Foamax®
Fire fighting systems & equipment

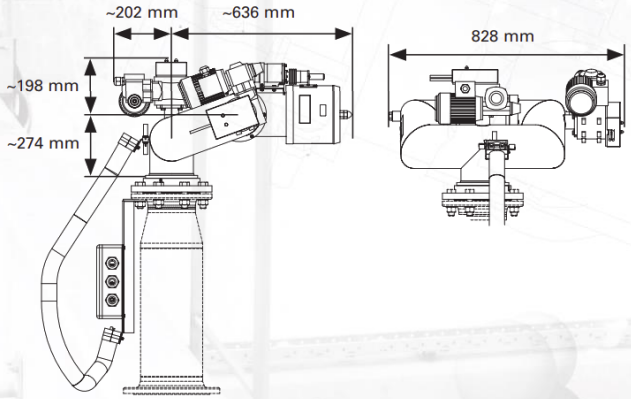
FJM 150 EL MV



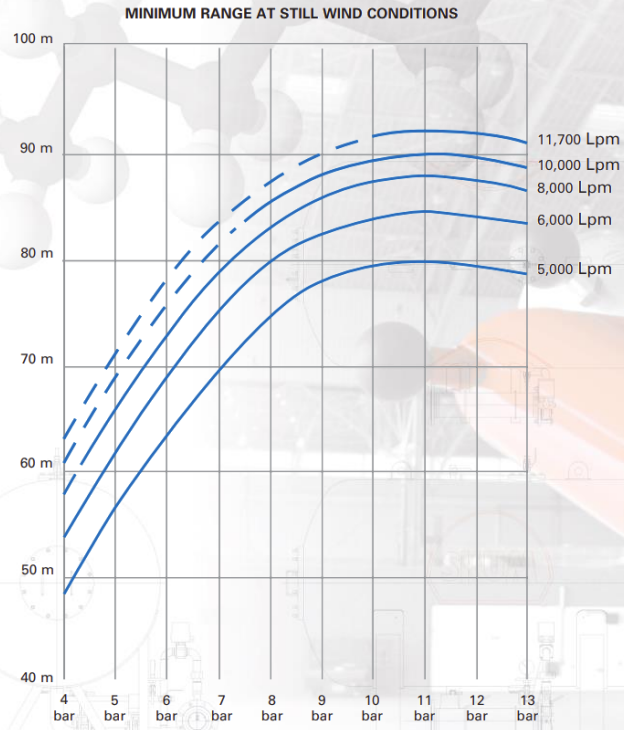
FJM 200 EL MV



FJM 150 EL LA

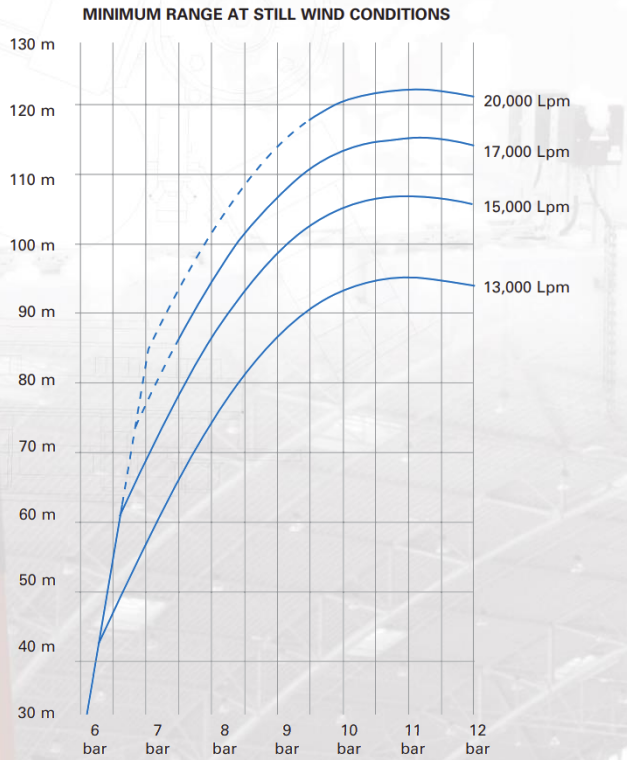


FJM-150 Jet Range



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

FJM-200 Jet Range



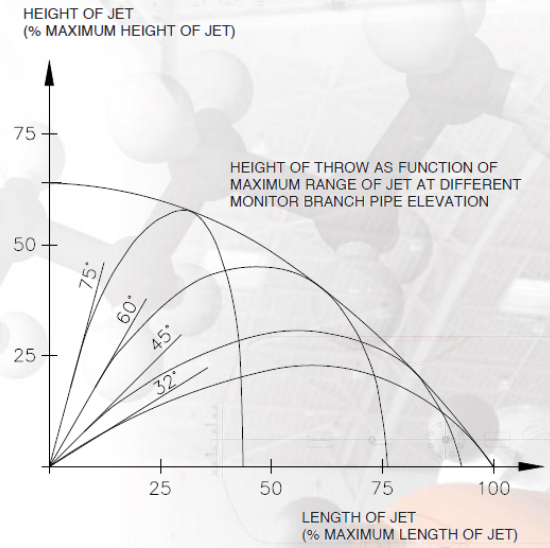
Note:
1. Deduct 10% for self induction nozzle.
2. Reaction force (N) = 0.233 × (Lpm) × √p (bar)
3. Achieving the values in the range of jet graph depends on the monitor's elevation angle. See the length-height relationship graph.

Table 2: Performance Data				
FJM series standard	**FJM-80**	**FJM-100**	**FJM-150**	**FJM-200**
Water capacity [l/min]	500 – 2500	1000 - 6000	3000 - 11700	8000 - 20000
Design pressure	4 - 16 bar	4 - 16 bar	4 - 16 bar	4 - 16 bar
Design pressure (Optimum)	10 - 12 bar	10 - 12 bar	10 - 12 bar	10 - 12 bar
Rotation	± 175°			
Elevation	-65° / +70°	-70° / +70°	-70° / +70°	-60° / +70°
Foam throw range*	55m	70m	85m	n.d.
Pressure*	16 bar		10 bar	n.d.
Expansion ratio*	6,6	6,7	6,4	b.d.
Weight	28,5 kg	69 kg	98 kg	139 kg

*** Foam parameters (throwing range, pressure, expansion ratio) were obtained during tests with non-fluorinated foaming agents: SKUM NFF 3x3 UL201, ANSUL NFF 3x3 UL201, T-STORM NFF 3x3 UL201. The applied pressure for FJM-150 [10 bar] results the scope of accreditation of the CNBOP-PIB Certification Unit.**

FJM series inbuilt inductor	FJM-100 S	FJM-150 S
Water capacity [l/min]	1000 - 6 000	3000 - 11700
Design pressure	4 - 16 bar	4 - 16 bar
Design pressure (Optimum)	10 - 12 bar	10 - 12 bar
Maximum foam capacity	320 l/min	600 l/min
Rotation	± 178°	
Elevation	-45°/+70°	-45°/+70°
Suction connection	2" BSP	2" BSP
Weight	72 kg	101 kg

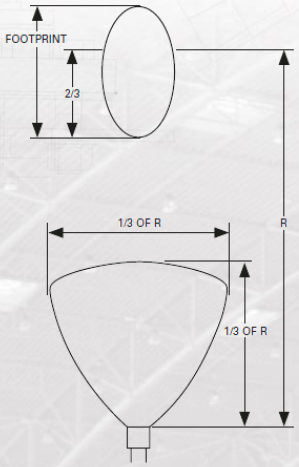
Length - Height Relationship



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.

Average Fog/Jet Pattern in Still Air



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