

HOM-4B WATER POWERED OSCILLATING MONITOR

NDD215

- Superior Foam Expansion For Excellent Foam Performance
- Low Cost Installation Without Welding
- Integral Foam Maker And Deflector Which Eliminates The Need To Install A Wind Shield
- Corrosion Resistant Polyester Finish



Description

The HOM-4B Water-Powered Oscillating Monitor provides unparalleled performance with simple, yet rugged, brass waterway for superior corrosion resistance in a very compact package. The monitor is designed to provide an oscillating water or foam stream over a preset area of protection. The monitor is supplied with an integral, non-aspirating nozzle which is available with flow rate choices from 600 to 1200 gpm (2271-4242 lpm) @ 100 PSI (6.9 Bar) inlet pressure to the monitor connection.

Features

- Extremely compact – 20" (508 mm) overall height with mounting base only 24" (610 mm) long x 15-1/4" (387 mm) wide
- Simple set-up/adjustment features
- All oscillating mechanism components constructed of brass, stainless steel and fiberglass for superior corrosion resistance and wear
- Oscillating mechanism equipped with manual disengagement lever for quick and easy manual override
- Manual disengagement mechanism features a clutch which automatically re-engages the oscillator to the previously set oscillation angle when monitor is moved anywhere within oscillation angle setting
- Non-aspirating nozzles offer a unique, easy-to-set, infinitely adjustable spray pattern feature from straight stream to oval-shaped spray

- Superior nozzle reach, since low profile permits nozzle elevation angle that optimizes performance while keeping stream below aircraft or other low level obstructions
- Suitable for operating pressures from 50 PSI to 150 PSI (3.5 Bar to 10.3 Bar)
- Very efficient oscillation mechanism requires only 3 gpm (11.41 lpm) water flow
- Test connection (3/4" garden hose) provides means to set oscillation mechanism without flow through the monitor
- Angle of oscillation arc infinitely adjustable from 10° to 180°; takes only seconds to adjust
- Oscillation speed infinitely adjustable from 10° to 20°/sec. Oscillation speed can be set to 0°/sec. in the event that oscillation is not needed
- Brass construction for superior corrosion resistance in marine environments
- Full 360° continuous rotation in manual mode
- Angle of elevation is infinitely adjustable from 20° below horizontal to 45° above. A simple locking screw maintains elevation setting. Elevation lock incorporates a quick release for manual operation which when reengaged locks elevation in original setting
- Water inlet to oscillator assembly is the full 360° of interior surface and has an integral self cleaning strainer which eliminates the potential of clogging, as with single point connections

Applications

The HOM-4B water-powered oscillating monitors are commonly used for under wing protection in aircraft hangars, helipads, loading racks and dike protection. They can also be used in marine applications such as docks and offshore platforms.

Specifications

Monitor shall be automatic oscillating type, requiring only water or foam solution inlet pressure to provide power to drive oscillator mechanism. The monitor shall be fabricated of cast brass and stainless steel, with all oscillating components constructed of brass, stainless steel and fiberglass for superior corrosion resistance and wear. Monitor inlet connection shall be a bottom mounted 4" 150# FF flange. Integral nozzle shall be non-aspirating type, designed for use with AFFF and Polar Solvent/AFFF type foams. Spray pattern shall be easy-to-set and infinitely adjustable from straight stream to oval shaped spray. Elevation and depression shall be infinitely adjustable from 20° below horizontal to 45° above horizontal and shall be maintained by a locking screw. Elevation lock shall incorporate a quick release for manual operation which when re-engaged locks elevation in original setting.

Oscillation mechanism shall utilize a rugged, efficient, stainless steel cable drive arrangement. Arc of oscillation shall be easy to set in the field and shall be infinitely adjustable from 10° to 180° degrees. Unit shall be equipped with

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Specifications (cont.)

a manual oscillation disengagement mechanism with clutch which automatically re-engages the oscillator to the previously set oscillation angle when monitor is moved anywhere within oscillation angle setting. Monitor shall have continuous 360° rotation in manual mode.

Oscillator assembly shall have an adjustable oscillation speed of 10° - 20°/sec and shall operate with a minimum inlet pressure of 50 PSI. Water flow required to operate oscillation mechanism shall not exceed 3 GPM (11.41 LPM). Water inlet to oscillator assembly shall be full 360° of interior surface and shall have an integral, two ply, self cleaning strainer, consisting of a finer inner mesh covered by perforated stainless steel outer cover. Surface area of strainer to area of pipe supplying oscillator shall exceed 50 to 1. Unit shall have external test connection (3/4"-11 1/2 NH garden hose swivel) for testing monitor oscillation without flowing water through the unit. Oscillation and speed adjustment shall be located under protective housing to prevent tampering.

Monitor must have a low profile design with a maximum unit height not exceeding 19 inches overall. Flow and range ratings of each unit shall be as shown on the appropriate curve and shall be based on the inlet pressure to the monitor and not the nozzle. Maximum working pressure shall be 150 PSI (10.3 Bar).

Technical Information

Materials of Construction:

- Monitor..... Cast Brass and Stainless Steel
- Oscillator:.....Brass, Stainless Steel and Fiberglass
- Osc. Enclosure:... Stainless Steel, Epoxy Powder Coat

Finish:

- Red Epoxy for Monitor & black epoxy for enclosure

Weight:

- Non-Aspirating 53 lb (24.1 kg)
- Aspirating60.2 lb (27.4 kg)

Flow Range:

600 to 1200 gpm (2271-4242) @ 100 psi (6.9 bar)

Working Pressure:

50 to 150 psi (3.5 to 10.3 bar)

Elevation/Depression:

-20° to 45°

Arc of Oscillation:

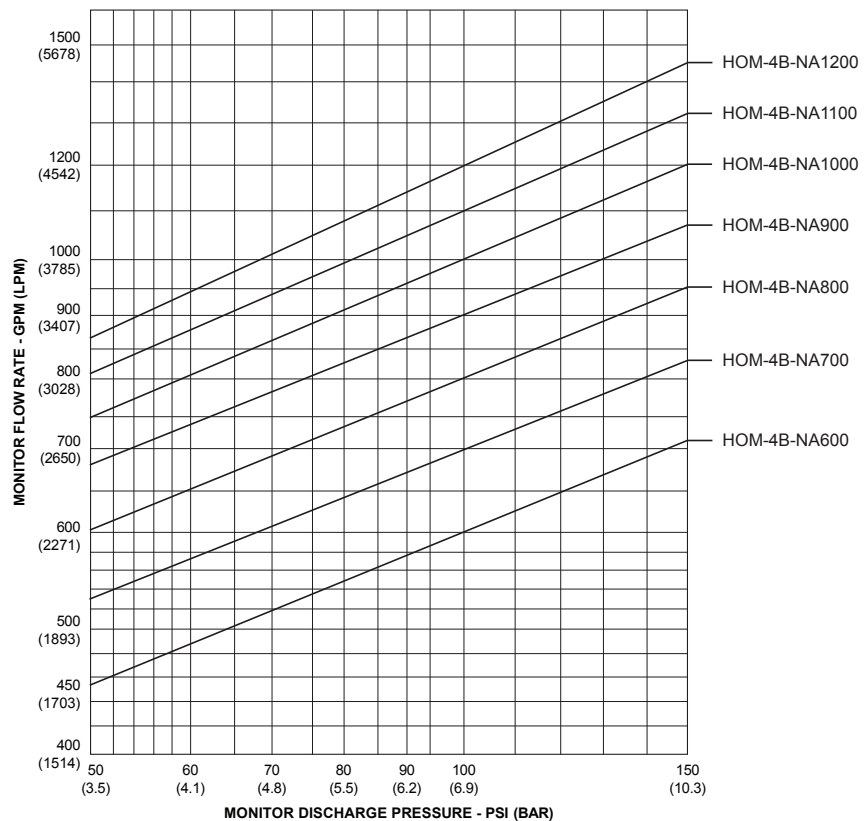
Adjustable, 10° to 180°

Oscillation Speed:

Adjustable, 10° to 20°/sec

Options

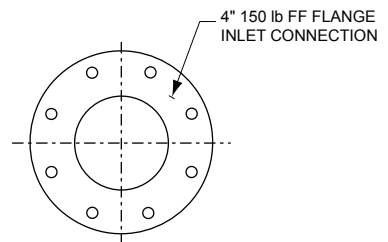
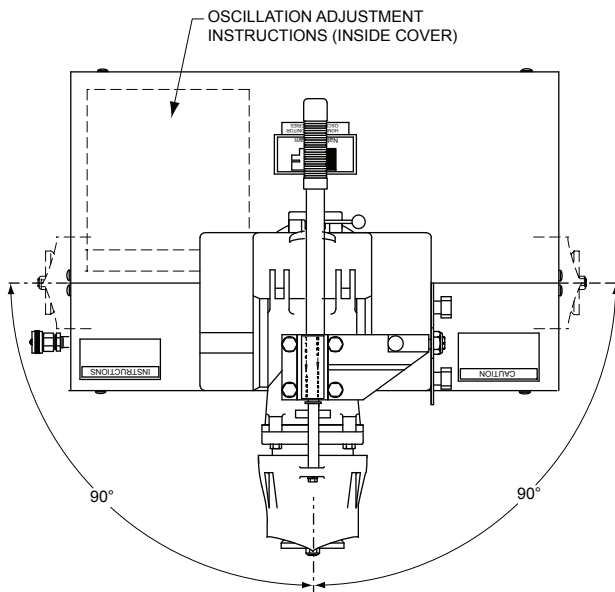
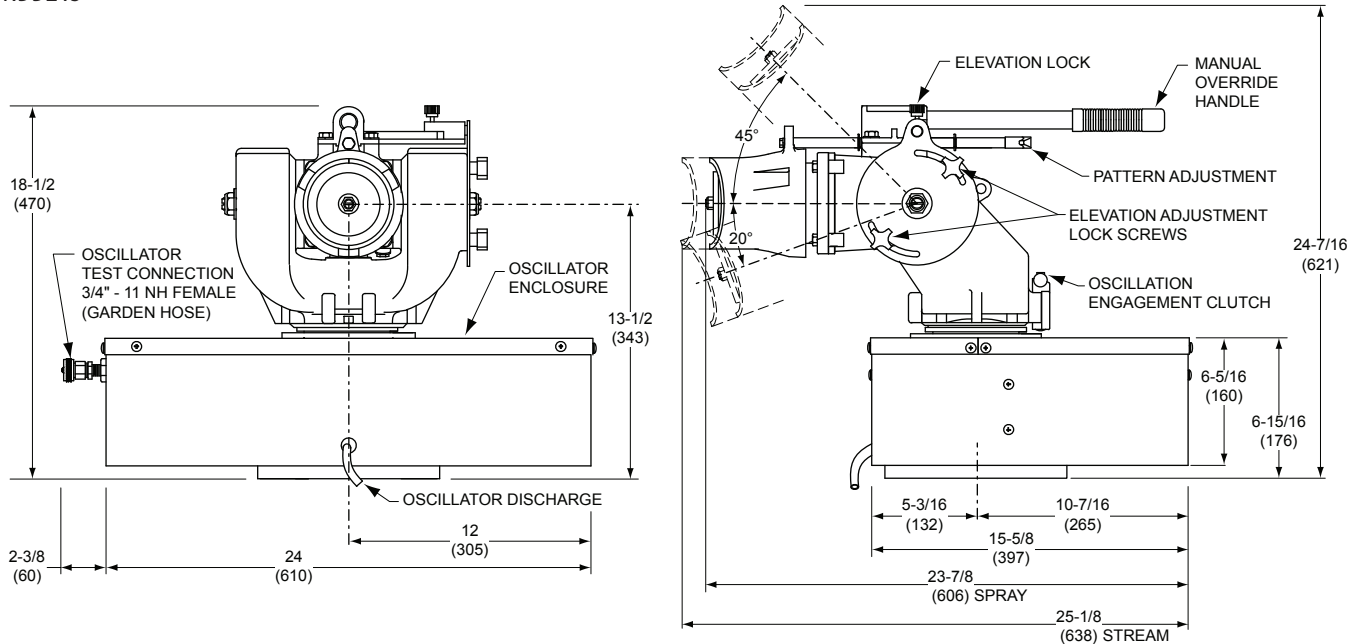
- Anti-freeze Kit
- NH Discharge Thread Adapter



HOM-4B FLOW RATE VS. PRESSURE CHART

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NOTES:

1. Monitor oscillation system shall be charged with a 50% solution of glycol based anti-freeze and water to protect against corrosion and freezing in cold climates.
2. Monitor shall have 15" radius of clear area about center of 4" inlet connection to prevent interference with oscillating monitor.
3. Monitor inlet flange is tapped. Use 5/8-11 x 2" screws for installation.

OUTLINE DRAWING - HOM-4B MONITOR WITH NON-ASPIRATING NOZZLE

HOM-4B

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RANGE DATA (FEET)

Model No.	Incline Angle (°)	Monitor Inlet Pressure - psi (bar)									
		50 (3.45)		75 (5.17)		100 (6.9)		125 (8.62)		150 (10.3)	
		Fixed	Osc.	Fixed	Osc.	Fixed	Osc.	Fixed	Osc.	Fixed	Osc.
600	10	60	51	85	72	115	98	150	128	165	140
	15	80	68	105	89	135	115	160	136	185	149
	22.5	95	81	120	102	150	128	170	145	190	162
	30	110	94	135	115	165	140	175	149	195	166
700	10	60	51	85	72	115	98	150	128	165	140
	15	80	68	110	94	140	119	170	145	190	162
	22.5	100	85	130	111	165	140	190	162	210	179
	30	115	98	140	119	175	149	195	166	215	183
800	10	60	51	85	72	120	102	150	128	175	149
	15	85	72	115	98	155	132	185	157	205	174
	22.5	105	89	135	115	175	179	205	174	215	183
	30	120	102	145	123	180	153	210	179	220	187
900	10	65	55	90	77	125	106	155	132	175	149
	15	85	72	115	98	160	136	185	157	205	174
	22.5	105	89	140	119	180	153	210	179	220	187
	30	120	102	150	128	190	162	215	183	225	191
1000	10	65	55	90	77	125	106	155	132	175	149
	15	85	72	115	98	160	136	190	162	210	179
	22.5	110	94	140	119	185	157	210	179	225	191
	30	125	106	155	132	195	166	215	183	230	196
1100	10	70	60	95	81	130	111	155	132	175	149
	15	90	77	125	106	170	145	195	166	210	179
	22.5	110	94	145	123	190	162	215	183	225	191
	30	125	106	155	132	200	170	220	187	230	196
1200	10	75	64	100	85	135	115	160	136	175	149
	15	95	81	130	111	175	149	200	170	215	183
	22.5	115	98	150	128	195	166	215	183	230	196
	30	130	111	160	136	205	174	225	191	235	200

NOTES:

- To obtain range in meters – multiply range in feet by 0.3048.
- Oscillation rate at nominal 10°/sec.

ORDERING INFORMATION

Part Number	Model #	Flow @ 100 psi (6.9 bar)		Weight		Shipping	
		gpm	(lpm)	lb	(kg)	Ft ³	(m ³)
1252-0180-1	HOM-4B-NA-600	600	(2271)	204	93.1	4.2	0.13
1252-0180-2	HOM-4B-NA-700	700	(2650)	204	93.1	4.2	0.13
1252-0180-3	HOM-4B-NA-800	800	(3028)	204	93.1	4.2	0.13
1252-0180-4	HOM-4B-NA-900	900	(3407)	204	93.1	4.2	0.13
1252-0180-5	HOM-4B-NA-1000	1000	(3785)	204	93.1	4.2	0.13
1252-0180-6	HOM-4B-NA-1100	1100	(4164)	204	93.1	4.2	0.13
1252-0180-7	HOM-4B-NA-1200	1200	(4542)	204	93.1	4.2	0.13