



## DATA SHEET #NDD200

# HOM-2B WATER POWERED OSCILLATING MONITOR

### **Description**

The HOM-2B Water-Powered Oscillating Monitor provides unparalleled performance with simple, yet rugged design features in a compact package. The monitor is designed to provide an oscillating water or foam stream over a pre-set area of protection. The monitor can be supplied with either an integral non-aspirating or air-aspirating nozzle. Monitors are available with flow rate choices from 60 to 500 gpm (227 to 1893 lpm) at 100 psi (16.9 bar) inlet pressure to the monitor connection.

### **Features**

- Extremely compact – 19-1/2" (495 mm) overall height with mounting base only 15-5/16" long by 8-7/8" wide (389 x 225 mm).
- Simple set-up/adjustment features.
- Constructed of cast brass and stainless steel for superior corrosion resistance and wear.
- Oscillating mechanism equipped with manual disengagement lever for quick and easy manual override.
- Available with air-aspirating or non-aspirating nozzle. Aspirating nozzles have a blabbermouth to provide an adjustable straight stream to flat spray pattern. Non-aspirating nozzles have an adjustable straight stream to oval-shaped spray pattern.
- 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 to 150 psi (3.5 to 10.3 bar).
- Very efficient oscillation mechanism requires only 2 gpm (7.6 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°.
- Oscillation speed infinitely adjustable from 10° to 30°/sec. Oscillation speed can be set to 0°/sec in the event that oscillation is not needed.
- Full 360° continuous rotation in manual mode.
- Angle of elevation is infinitely adjustable from 45° below horizontal to 60° above. Quick-release elevation lock for manual operation.
- Oscillator assembly provided with water inlet strainer.

### **Applications**

HOM-2B water-powered oscillating monitors are commonly used for loading rack, dike, and helipad protection, as well as under-wing protection in aircraft hangars. They can also be used in marine applications such as docks and offshore platforms.

### **Technical Specifications**

The monitor shall be automatic oscillating-type, requiring only water or foam solution inlet pressure to drive the oscillator mechanism. The monitor shall be fabricated of cast brass and stainless steel, with all oscillating components constructed of brass and stainless steel for corrosion resistance and wear. The monitor inlet connection shall be a side mounted 2" grooved pipe. Elevation and depression shall be infinitely adjustable from 45° below horizontal to 60° above horizontal and shall be maintained by a locking mechanism. The elevation lock shall incorporate a quick release for manual operation which, when re-engaged, locks elevation in original setting.

The monitor shall be supplied with an integral nozzle that can be supplied in a non-aspirating or an air-aspirating configuration. See attached chart for available flows. The non-aspirating models shall be 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. The air-aspirating models shall be designed for use with protein and fluoroprotein-type foam concentrates, however, they are suitable for use with all foam concentrates. The air-aspirating nozzle shall incorporate a blabbermouth-type spray feature to provide an adjustable discharge pattern from straight stream to flat spray.

The oscillation mechanism shall utilize a piston-driven rack and gear drive arrangement. Arc of oscillation shall be infinitely adjustable from 10° to 180° and can be set in the field. The unit shall be equipped with a manual oscillation disengagement mechanism. When manually operating the monitor, re-engaging the oscillator mechanism within the preset arc of oscillation automatically returns the monitor to the preset oscillation pattern. The monitor shall have continuous 360° rotation in manual mode.

The oscillator assembly shall have an adjustable oscillation speed of 10° to 30°/sec and shall operate with a minimum inlet pressure of 50 psi. Water flow required to oper-

ate oscillation mechanism shall not exceed 2 gpm (7.61 lpm). A water inlet strainer shall be provided for oscillator assembly. The unit shall have an external test connection (3/4"-11 FNH 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.

The monitor shall have a low profile design with a maximum unit height not exceeding 19 1/2" 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).

**Approvals and Listings**

- FM Approved (Non-Aspirated HOM-2B-NA100 to 500 only)

**Technical Information**

*Materials of Construction:*

Monitor: .....Cast brass and stainless steel

Oscillator:

Components: .....Brass and stainless steel

Enclosure:.....Steel, epoxy-coated

**Nozzle:**

Non-Aspirating:.....Brass/stainless steel

Aspirating:.....Aluminum/stainless steel

*Finish:*.....Natural finish for monitor and nozzle, black epoxy for enclosure.

*Weight:*

Non-Aspirating: .....53 lb (24.1 kg)

Aspirating: .....60.2 lb (27.4 kg)

*Flow Range:* .....60 to 500 gpm (227 to 1893 lpm)  
@ 100 psi (6.9 bar)

*Working Pressure:* .....50 to 150 psi (3.5 to 10.3 bar)

*Elevation/Depression:*.....60° to -45°

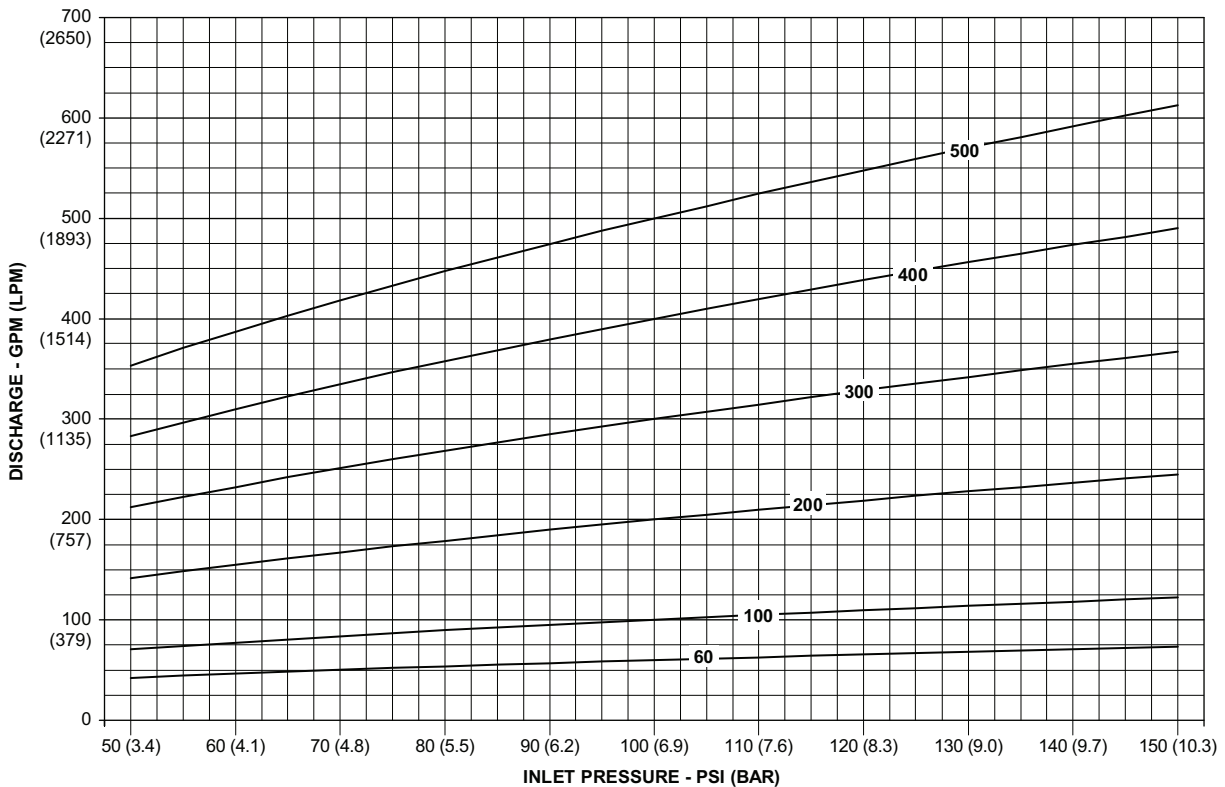
*Arc of Oscillation:*.....Adjustable, 10° to 180°

*Oscillation Speed:*.....Adjustable, 10° to 30°/sec

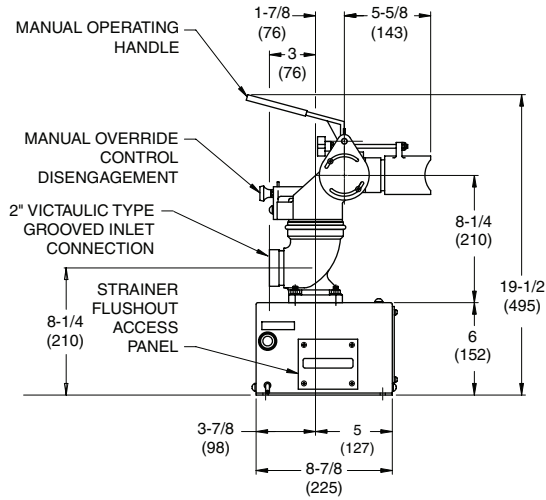
**Options**

*Anti-freeze Kit:*.....P/N: 1252-9410-4.

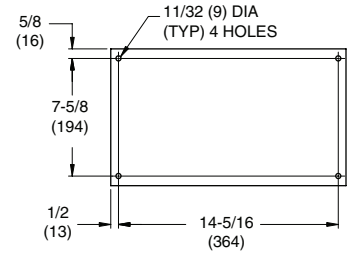
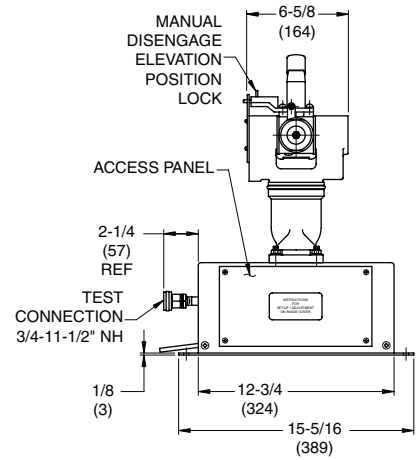
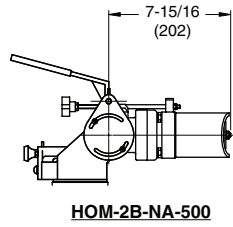
**HOM-2B FLOW RATE VS. PRESSURE CHART**



## OUTLINE DRAWING - HOM-2B MONITOR WITH NON-ASPIRATING NOZZLE



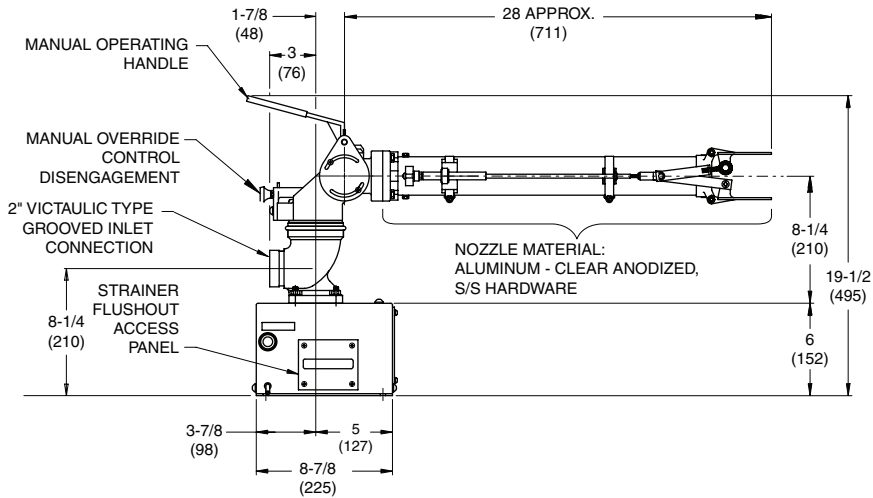
**HOM-2B-NA-60 THRU 400**



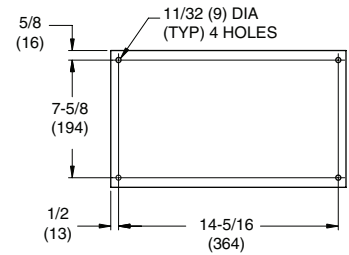
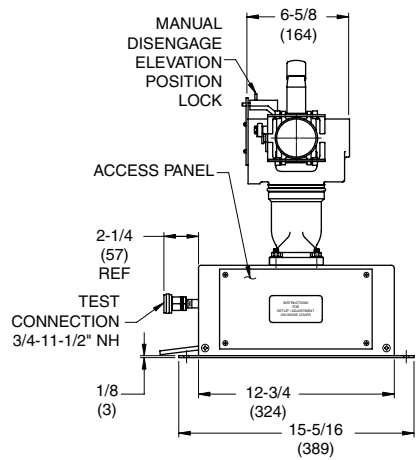
**NOTES:**

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 12" radius of clear area about center of monitor to prevent interference with oscillating monitor.

## OUTLINE DRAWING - HOM-2B MONITOR WITH AIR-ASPIRATING NOZZLE



**HOM-2B-AB-60 THRU 500**



**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 12" radius of clear area about center of monitor to the rear to prevent interference with oscillating monitor handle. Monitor shall have 30" clearance to the front and sides to prevent interference with oscillating monitor nozzle.

## RANGE DATA (FEET)

Model No.	Incl. Angle (°)	Non-Aspirating										Air-Aspirating									
		Monitor Inlet Pressure - psi (bar)										Monitor Inlet Pressure - psi (bar)									
		50 (3.45)		75 (5.17)		100 (6.9)		125 (8.62)		150 (10.3)		50 (3.45)		75 (5.17)		100 (6.9)		125 (8.62)		150 (10.3)	
		F	O	F	O	F	O	F	O	F	O	F	O	F	O	F	O	F	O	F	O
60	5	34	31	42	37	49	44	57	51	65	58	31	28	38	33	44	40	51	46	59	52
	10	46	42	55	50	65	58	75	67	84	76	41	38	50	45	59	52	68	60	76	68
	15	51	46	63	57	72	65	83	75	94	84	46	41	57	51	65	59	75	68	85	76
	25	54	48	65	58	75	67	86	77	96	87	49	43	59	52	68	60	77	69	85	76
100	5	40	36	49	44	58	52	67	60	76	68	36	32	44	40	52	47	60	54	68	61
	10	54	49	65	59	76	68	88	79	99	89	49	44	59	53	68	61	79	71	89	80
	15	60	54	74	67	85	77	98	88	110	99	54	49	67	60	77	69	88	79	99	89
	25	63	57	76	68	88	79	101	91	113	102	57	51	68	61	79	71	91	82	102	92
200	5	50	45	68	61	86	77	98	88	110	99	45	41	61	55	77	69	88	79	99	89
	10	62	56	83	75	10	90	114	103	122	110	56	50	75	68	9	81	103	93	110	99
	15	78	70	102	92	120	108	133	120	140	126	70	63	92	83	108	97	120	108	126	113
	25	86	77	105	95	120	108	130	117	135	122	77	69	95	86	108	97	117	105	122	110
300	5	53	48	77	69	100	90	118	107	134	119	48	43	69	62	90	81	106	96	121	107
	10	68	61	90	81	113	102	131	118	146	131	61	55	81	73	102	92	118	106	131	118
	15	90	81	111	100	140	126	157	141	169	152	81	73	100	90	126	113	141	127	152	137
	25	95	86	121	109	142	128	158	142	169	152	86	77	109	98	128	115	142	128	152	137
400	5	67	60	96	86	120	108	139	125	155	140	60	54	86	77	108	97	125	113	140	126
	10	75	68	103	93	126	113	144	130	160	144	68	61	93	84	113	102	130	117	144	130
	15	86	77	113	120	134	121	150	135	164	148	77	69	102	108	121	109	135	122	148	133
	25	91	82	115	104	134	121	150	135	164	148	82	74	104	94	121	109	135	122	148	133
500	5	60	34	90	81	115	104	134	121	150	135	54	31	81	73	104	94	121	109	135	122
	10	80	72	108	97	133	120	152	137	165	149	72	65	97	87	120	108	137	123	149	134
	15	95	86	133	120	159	143	178	160	185	167	86	77	120	108	143	129	160	144	167	150
	25	103	93	138	124	164	148	184	166	200	180	93	84	124	112	148	133	166	149	180	162

- NOTES:**
- To obtain range in meters – multiply range in feet by 0.3048.
  - Oscillation rate at nominal 10°/sec.
  - The "F" and "O" refer to range when the monitor is in a fixed (F) or oscillating (O) position.

### Ordering Information

Part Number	Model #	Flow @ 100 psi (6.9 bar)		Empty Weight		Approx. Shipping	
		gpm	lpm	lb	kg	ft <sup>3</sup>	m <sup>3</sup>
<b>Non-Aspirating</b>							
1252-0150-1	HOM-2B-NA-60	60	227	53	24.1	1.5	0.04
1252-0150-3*	HOM-2B-NA-100	100	378	53	24.1	1.5	0.04
1252-0150-5*	HOM-2B-NA-200	200	757	53	24.1	1.5	0.04
1252-0150-7*	HOM-2B-NA-300	300	1135	53	24.1	1.5	0.04
1252-0150-9*	HOM-2B-NA-400	400	1514	53	24.1	1.5	0.04
1252-0151-0*	HOM-2B-NA-500	500	1893	53	24.1	1.5	0.04
<b>Air-Aspirating</b>							
1252-0152-1	HOM-2B-AB-60	60	227	60.2	27.4	1.5	0.04
1252-0152-3	HOM-2B-AB-100	100	378	60.2	27.4	1.5	0.04
1252-0152-5	HOM-2B-AB-200	200	757	60.2	27.4	1.5	0.04
1252-0152-7	HOM-2B-AB-300	300	1135	60.2	27.4	1.5	0.04
1252-0152-9	HOM-2B-AB-400	400	1514	60.2	27.4	1.5	0.04
1252-0153-0	HOM-2B-AB-500	500	1893	60.2	27.4	1.5	0.04

\* indicates FM Approved

This information is only a general guideline, and each installation may require modifications to meet the applications or requirements of that situation. The company reserves the right to change any portion of this information without notice. Terms and conditions of sale apply and are available on request.

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