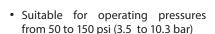
# FOAM

### HOM-2B WATER POWERED OSCILLATING MONITOR NDD200

- Large Open Area Protection
- 60 To 500 GPM Flow
- Aspirated or Non-Aspirated Versions
- Adjustable Speed, Elevation, And Oscillation
- Automatic And Manual Control
- Stainless Steel, Brass, Powder Coated Steel Construction



- Very efficient oscillation mechanism requires only 2 gpm (7.6 lpm) water flow.
- Test connection (¾" 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.

#### 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 reengaged, 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,

#### 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 nonaspirating 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.



## HOM-2B WATER POWERED OSCILLATING MONITOR

NDD200

#### **Specifications (cont.)**

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 operate 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 (¾"-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<sup>1</sup>/<sub>2</sub>" 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:                    |
| Components Brass/Stainless     |
| Steel                          |
| EnclosureSteel, Epoxy-coated   |
| Nozzle:                        |
| Non-Aspirating Brass/Stainless |
| Steel                          |
| Aspirating Aluminum/Stainless  |

#### Finish:

Red fused polyurethane powder coat for monitor and nozzle, black fused polyurethane powder coat 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°

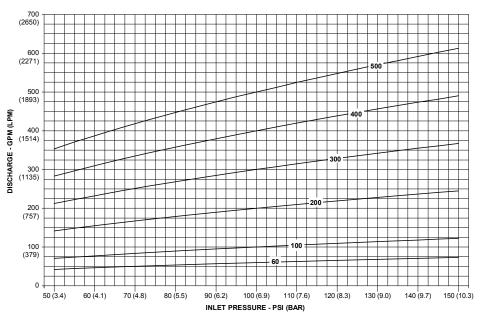
Oscillation Speed: Adjustable, 10° to 30°/sec

#### Options

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



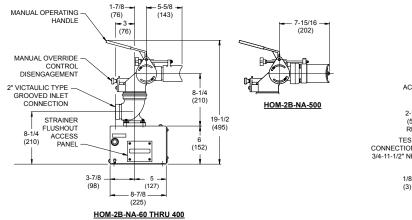
Steel





### HOM-2B WATER POWERED OSCILLATING MONITOR

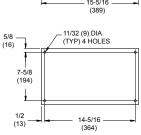
NDD200



#### 6-5/8 MANUAL (164) DISENGAGE A POSITION LOCK ۲ ACCESS PANEL 2-1/4 (57) REF TEST CONNECTION 1 BB 3/4-11-1/2" NH 1/8 12-3/4 (3) (324) 15-5/16

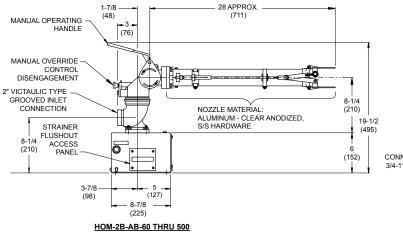


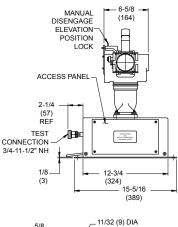
- 1. Monitor oscillation system shall be charged with a 50% solution of glycol based anti-freeze and water to protect against corrosion and freezing in cold climates.
- 2. Monitor shall have 12" radius of clear area about center of monitor to prevent interference with oscillating monitor.

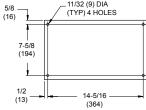


#### **OUTLINE DRAWING - HOM-2B MONITOR WITH AIR-ASPIRATING NOZZLE**

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







#### 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.



### HOM-2B WATER POWERED OSCILLATING MONITOR

NDD200

RANGE DATA (FEET)

|       |                | Non-Aspirating                     |    |     |                    |     |            |     |            |     | Air-Aspirating                     |    |           |     |           |     |            |     |            |     |     |
|-------|----------------|------------------------------------|----|-----|--------------------|-----|------------|-----|------------|-----|------------------------------------|----|-----------|-----|-----------|-----|------------|-----|------------|-----|-----|
| Model | Incl.<br>Angle | Monitor Inlet Pressure - psi (bar) |    |     |                    |     |            |     |            |     | Monitor Inlet Pressure - psi (bar) |    |           |     |           |     |            |     |            |     |     |
|       |                | 50 (3.45) 75                       |    |     | 5 (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) |     |     |
| No.   | (°)            | F                                  | 0  | F   | 0                  | F   | 0          | F   | 0          | F   | 0                                  | F  | 0         | F   | 0         | F   | 0          | F   | 0          | F   | 0   |
| 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 |               |            |               |       |        |                  |      |  |  |  |
|----------------------|---------------|------------|---------------|-------|--------|------------------|------|--|--|--|
|                      |               | Flow @ 100 | psi (6.9 bar) | Empty | Weight | Approx. Shipping |      |  |  |  |
| Part Number          | Model #       | gpm        | (kg)          | lb    | (kg)   | Ft <sup>3</sup>  | (m³) |  |  |  |
| Non-Aspirating:      |               |            |               |       |        |                  |      |  |  |  |
| 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 |  |  |  |
| Air-Aspirating:      |               |            |               |       |        |                  |      |  |  |  |
| 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 |  |  |  |

#### Page 4 of 4

#### **National Foam**

350 East Union Street, West Chester, PA 19382, USA 24hr **RED ALERT**<sup>®</sup> : 610-363-1400 • Fax: 610-431-7084 <u>www.nationalfoam.com</u> 03/19 NDD200 (Rev L)

National Foam operates a continuous program of product development. The right is therefore reserved to modify any specification without prior notice and National Foam should be contacted to ensure that the current issues of all technical data sheets are used. © National Foam