



DATA SHEET #NDD250

MMB-4 MANUAL BRASS MONITOR

Description

The MMB-4 manually operated brass monitor provides unparalleled performance with simple yet rugged design features that provide ease of operation, minimum maintenance, and resistance to normally destructive environments. The monitor is suitable for use with all foam concentrate types with either salt or fresh water. When using air-aspirating foam nozzles the monitor is provided with a gas spring counterbalance assembly to offset the weight of the nozzle. MMB-4 Type Monitors are in active service from the Arctic Circle to the tropics and are well suited for marine applications.

Features

- Cast brass construction for excellent corrosion resistance.
- Integrally cast straightener vanes in each elbow section to reduce waterway turbulence and friction loss.
- Full 4" waterway.
- Vertical and horizontal joints have internal brake band position locks.
- Suitable for operating pressures from 50 psi to 250 psi (3.5 bar to 17.2 bar).
- Swivel joints are ball bearing type equipped with o-ring seals to prevent water leakage.
- Monitor is designed to eliminate effects of nozzle thrust reaction.
- Full 360° continuous rotation.
- Angle of elevation is infinitely adjustable from 45° below horizontal to 90° above horizontal.
- Gas spring counterbalance to offset weight of air-aspirating type foam nozzles.

Applications

The MMB-4 manually operated brass monitors are commonly used for protection of flammable liquid storage tanks, dikes, and loading racks. They are also suitable for use in marine applications, such as tankers and chemical carriers, as well as oil rigs, docks, piers, and offshore platforms.

Specifications

The monitor shall be of a single waterway cast design with integrally cast straightener vanes in each elbow section to reduce waterway turbulence and friction loss. All waterways shall be a full 4-inch (102 mm) diameter and shall be capable of flowing a maximum of 2000 gpm (7571 lpm) with a pressure loss not exceeding 19 psi (1.31 bar). The monitor body shall be manufactured from

cast brass to provide a rugged design requiring minimum maintenance and superior corrosion resistance. The monitor shall have a 4" 150 lb ASA flat-faced flange inlet and a 4" NH (NST) male hose thread outlet. The discharge shall be available with 2½" MNH, 3½" MNPSH, and 4" MNH connections, as well as 4" and 5" FF flanged connections. The monitor shall have continuous rotational travel through 360°. Vertical elevation (up and down) travel shall be 90° above horizontal to 45° below horizontal with tapped holes provided to stop travel past 45° above and at 0° horizontal. Vertical and horizontal swivel joints shall incorporate an internal brake band position lock mechanism capable of holding position against a 95 foot-pound torque with a 50 inch-pound torque applied to the position locking knob. Swivel joints shall be a single race type with brass ball bearings and Buna-N o-ring seals to prevent water leakage through the swivel, as well as dust, dirt, and other foreign matter from entering the ball bearing race.

The nozzle thrust reaction shall travel through the vertical axis of the rotational joint and through the horizontal axis of the elevation joint, thus eliminating any "pinwheel" effects due to torque acting on the swivel joints. Each monitor shall be supplied with a "T" handle fitted to a socket holder. The handle shall be easily removable by means of a quick-release pin through the handle and handle socket. The monitor shall have provisions for counterbalancing air-aspirating type foam nozzles. Units with 4" or 5" flanged discharges shall be supplied with the gas spring type counterbalance as a standard component.

Technical Data

Material of Construction:

Basic Monitor	Cast Brass ASTM B585/ C83600 (85-5-5-5)
Ball Bearings	Brass ASTM B134
O-Rings	Buna-N
Handle	Brass ASTM B16
Misc. Hardware	Brass ASTM B16, Stainless Steel ASTM A276

Gas Spring:

- Cylinder Body Carbon Steel ASTM A519,
epoxy coated
- Cylinder Rod Stainless Steel ASTM A276

Connections:

Inlet	4"-150# ASA FF Flange
Discharge	2½" MNH, 3½" MNPSH, and 4" MNH; 4" and 5" FF flange as required.

Maximum Flow:..... 2000 gpm (7571 lpm)
 Max. Oper. Pressure: 250 psi (17.2 bar)
 Pressure Loss:
 2000 gpm (7571 lpm) 19 psi (1.31 bar)
 1500 gpm (5678 lpm) 11 psi (0.76 bar)
 1000 gpm (3785 lpm) 5 psi (0.34 bar)
 Nozzle Thrust Reaction: .. pounds = gpm x psi x 0.0505
 Finish: Red polyurethane enamel paint
 Weight: 122 lb (55 kg)

Gas Spring
 Counterbalance: Standard on monitors with 4" or 5" flanged discharges. All other units supplied without counterbalance.

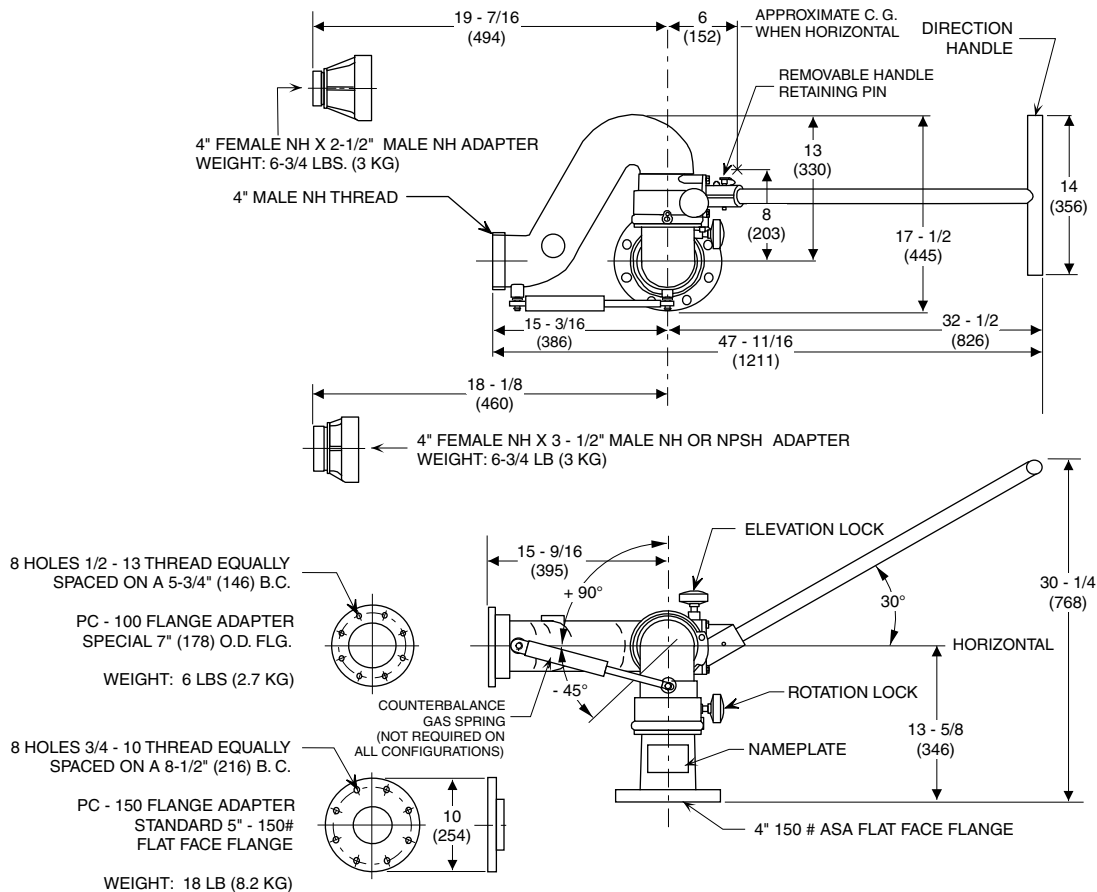
Approvals

- U.S.C.G.

Options

- NPSH hose threads

MMB-4 MANUAL BRASS MONITOR



Ordering Information

Part Number	Description	Weight
1252-0006-1	MMB-4 Monitor 4" Flg. Discharge (PC-100) w/Gas Spring	127 lb - 57.7 kg
1252-0006-2	MMB-4 Monitor 2-1/2" MNH Discharge	125 lb - 56.8 kg
1252-0006-3	MMB-4 Monitor 3-1/2" MNPSH Discharge	125 lb - 56.8 kg
1252-0006-4	MMB-4 Monitor 4" MNH Discharge	122 lb - 55.3 kg
1252-0006-5	MMB-4 Monitor 5" Flg. Discharge (PC-150) w/Gas Spring	127 lb - 57.7 kg

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.

05/09 (Rev C) Printed in U.S.A. (NDD250.PMD)

NATIONAL FOAM, INC.

P.O. Box 695 • Exton, PA 19341-0695 • (610) 363-1400 • Fax: (610) 524-9073

www.Kidde-Fire.com