

6" GEAR OPERATED MANUAL MONITOR

NDD290

- Smooth Precision Worm Gear Actuation
- 316 Stainless Steel Swivel and Bearings
- Low Profile Design
- ANSI Style Inlet and Discharge Flanges
- 316 Stainless Steel Waterway



Description

The 6" gear operated, manual monitor provides unparalleled performance with simple, yet rugged, design features that provide ease of operation, minimum maintenance and resistance to normally destructive environments. They are suitable for use with all foam concentrate types with either salt or fresh water. The monitor can be used with air aspirating foam nozzles without the need for any additional counterbalance to offset the weight of the nozzle. The 6" gear operated, manual monitors are in active service from the Arctic Circle to the tropics and are well suited for marine applications.

Features

- Welded stainless steel waterway with fused polyester powder coat finish for excellent corrosion resistance
- Full 6" waterway
- Low profile design
- Vertical & horizontal joints have gear operators for ease of operation
- Suitable for operating pressures from 50 PSI to 200 PSI (3.5 Bar to 13.8 Bar)
- Corrosion resistant stainless steel swivel joints with ball bearings. Joints are equipped with Parker Poly-Pak® 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 60° below horizontal to 90° above horizontal
- Counterbalance not required to offset weight of air aspirating type foam nozzles

Applications

The 6" gear operated, manual monitors are commonly used for protection of flammable liquid storage tanks, dikes and loading racks. They are 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, fabricated stainless steel large open diameter design to reduce waterway turbulence and friction loss. All waterways shall be a full 6 inch (152mm) diameter and shall be capable of flowing a maximum of 5283 GPM (20000 LPM) with a pressure loss not exceeding 23.0 PSI (1.60 Bar). Monitor waterway shall be fabricated 316 stainless steel with stainless steel swivels to provide a rugged design requiring minimum maintenance. The waterway shall be passivated and coated externally with a red gloss epoxy finish for superior corrosion resistance to normally destructive environments. Monitor shall have a 6 inch 150 lb. ASA raised face flanged inlet and outlet. The monitor shall have continuous

rotational travel through 360°. Vertical elevation (up and down) travel shall be 90° above horizontal to 60° below horizontal. Vertical and horizontal swivel joints shall incorporate worm gear drives. Swivel joints shall be a double race type with stainless steel ball bearings and PTFE Viton seals prevent water leakage through the swivel or dust, dirt and other foreign matter from entering the ball bearing race. All gear housings shall have grease points for lubrication.

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. The monitor shall not require counterbalancing when using air aspirating type foam nozzles.

Technical Data

Material of Construction:

| | |
|----------------------|-------------------------------|
| Basic Monitor | Welded Stainless Steel 316 SS |
| Swivel Joint | Stainless Steel 316 SS |
| Ball Bearings | Stainless Steel 316 SS |
| Seals..... | PTFC/Viton |
| Misc. Hardware | Stainless Steel ASTM A276 |
| Gear Drive: | |
| Gears..... | Carbon Steel |
| Handwheel..... | DuroPlast |
| Housing..... | Stainless Steel |

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Technical Data (cont.)

Connections:

Inlet..... 6"-150# ASA FF Flange
Discharge..... 6"-150# ASA FF Flange

Maximum Flow:.... 5283 GPM(20000 LPM)

Maximum Operating Pressure:
232 PSI (16.0 Bar)

Pressure Loss:23.0 PSI @ 5283 GPM
(1.60 Bar @20000LPM)

Nozzle Thrust Reaction:

Lbs. Thrust = GPM x \sqrt{p} x 0.0505

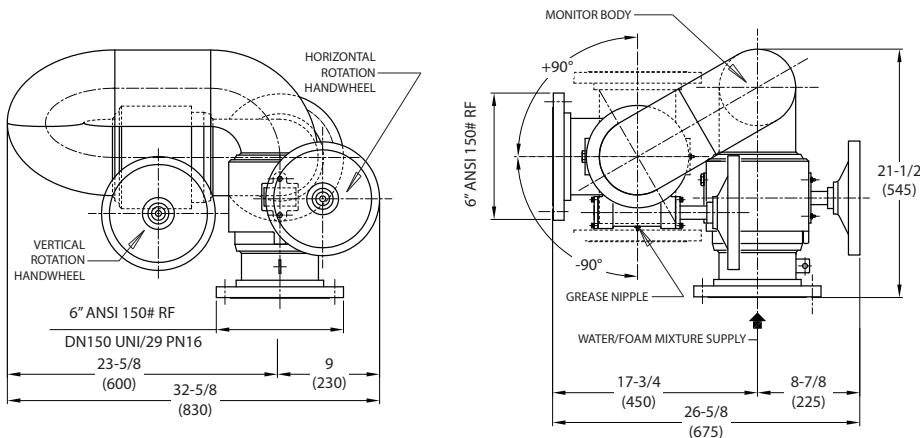
Finish:

Red Fused Polyester Powder Coat

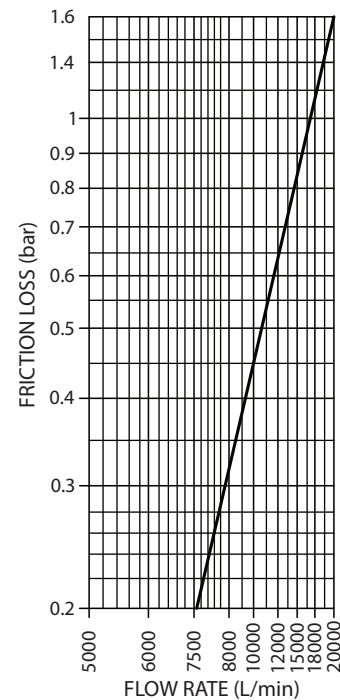
Weight:..... 309 lbs. (140 kg)

Options

Hydraulic Actuation



6" GEAR OPERATED MANUAL MONITOR



ORDERING INFORMATION

| Part Number | Description | Weight |
|-------------|---|-----------------|
| 1252-3601-6 | 6" Gear Operated, Manual Monitor, Stainless Steel Waterway | 309 LB - 140 kg |
| 1252-3601-8 | 6" Gear Operated, Hydraulic Monitor, Stainless Steel Waterway | 309 LB - 140 kg |