

## OM-80 WATER POWERED OSCILLATING MONITOR

NDD270

- Exceptional operational reliability
- Long life Severe Exposure
- Low maintenance
- Compact and low profile



## Description

The National Foam OM-80 is a nominal 3 in. (80mm) waterway Oscillating Monitor, designed to provide optimized hydraulic efficiency and long throw performance when the National Foam Gladiator nozzles or PC Series aspirated nozzles are fitted. The compact low profile configuration, makes this monitor particularly suitable for installation on towers, aircraft hangars, offshore platforms for helideck protection and other areas where space is limited.

The OM-80 is engineered to the highest standards to withstand severe environmental conditions and provide exceptional operational reliability, long life and extremely low maintenance.

Experience has shown a 20+ year life span is achievable, even under harsh conditions. A sealed for life gearbox is provided with adjustable sweep angle between 45° and 120° in 15° intervals and an oscillating speed control. Sealed low friction joints ensure easy movement even at high operating pressures. A highly efficient pelton wheel water motor uses small quantities of fire main water to provide power for automatic oscillation. The OM-80 will therefore operate automatically, immediately after start up of the fire pump and requires no secondary (electric) power source. A quick release lever allows automatic oscillation to be overridden and reengaged easily during operation.

When fitted standard with the National Foam Gladiator nozzles the OM-80 is highly effective with water or film forming foams for fast flame attack on hydrocarbon flammable liquids and polar solvents on helidecks, aircraft hangars, process areas, tanker loading bays or diked areas surrounding bulk storage tanks. The OM-80 can also be fitted National Foam aspirated PC Series nozzles which also guarantee optimized foam quality and discharge characteristics with the National Foam range of foam concentrates. Maximum performance and discharges of up to 250 feet can be achieved depending on nozzle/cannon configuration(see separate nozzle/cannon data sheets).

National Foam Sealed low friction joints provide easy elevation and horizontal movement even under high operating pressures. The quick and easy Clamp-Lok™ mechanism ensures the monitor is safely locked in position and can be left to operate unattended.

Two optional test kit are available.

The dry test kit avoids passing any liquid onto the hazard area to allow for periodic oscillation testing of the monitor.

The wet test kit requires a separate temporary water test line to test the pelton wheel.

National Foam maintains a Quality Management System which complies with the requirements of ISO 9001-2015.

### **Technical Data**

Operating Pressure:	
Max:23	32 psi (16 bar)
Min:	.73 psi (5 bar)
[58 psi (4 bar) to	special order]
Test Pressure34	18 psi (24 bar)
Maximum Flow 1189 gp	m (4,500 lpm)
Inlet Flange Connections: 4" ANSI Class 150 RF (a	Iternatives to
special order)	itematives to

Outlet Connection: 2", 21/2" NH Male

Sweep Angle:

Automatic.....45°-120° in 15° intervals Manual......360° continuous

Nominal Elevation\*:

Max +75° above horizontal (+85° in upright mode)

Nominal Depression\*:

- Max -70° below horizontal
- Limited to -5° over gearbox in low profile mode
- Limited to -45° or -20° over gearbox in upright mode

Nominal Oscillating Frequency: 8 cycles/min @ 102 psi (7 bar)

Nominal Flow Rate Through Water Motor: ...............10 gal/min @ 102 psi (30 litres/min @ 7 bar)

Approximate Weight: (without nozzle)......165 lb (75 kg)

**Note:** \* Low profile to upright mode adjustable on site.

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Materials of Construction:

Monitor Body .......Alum Bronze AB2
and
Gunmetal LG2 to BS EN 1982
Gearbox .......Cast SG iron to BS2789
with
phosphor bronze worm wheels,
hardened worm shaft and
stainless steel Input/output shaft
Water Mtr Pelton Wheel .......Phosphor

Seals.......Nitrile synthetic rubber
Finish:

Monitor......Natural

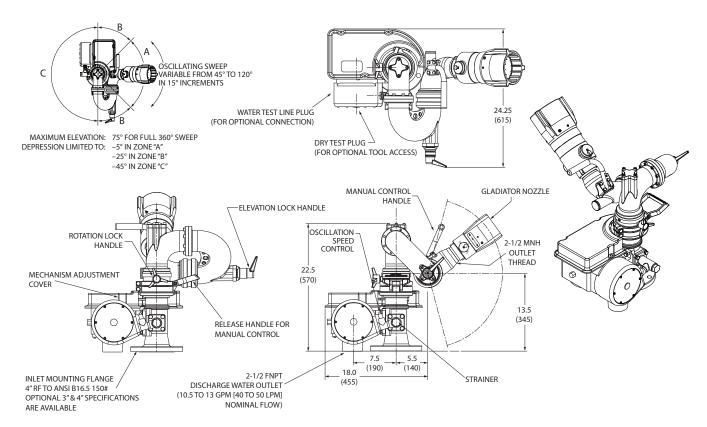
(Red to special order)
Gearbox Cover......Phenolic Heat
resistant laminate
Grab handle......Stainless steel 316
Fasteners.....Stainless steel A2
Optional Test Kits:
Dry test kit......AES 25917

Wet test kit (25mm Storz) .. AE 25657

## **Approvals**

Lloyds Register Rules\*\*.....(SOLAS)
Marine & Coastguard Agency\*\* .....(MCA)

Note: \*\* - OM80 fitted with Angus
LTN900, LTN1800 or LTN2700 nozzles.



ORDERING INFORMATION									
		Flow @ 100 psi (6.9 bar)		Weight		Shipping			
Part Number	Description	gpm	(kg)	lb	(kg)	Ft³	(m³)		
1252-2110-6	OM-80 WP Osc. Monitor	600	(2271)	204	93.1	4.2	0.13		

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## **National Foam**