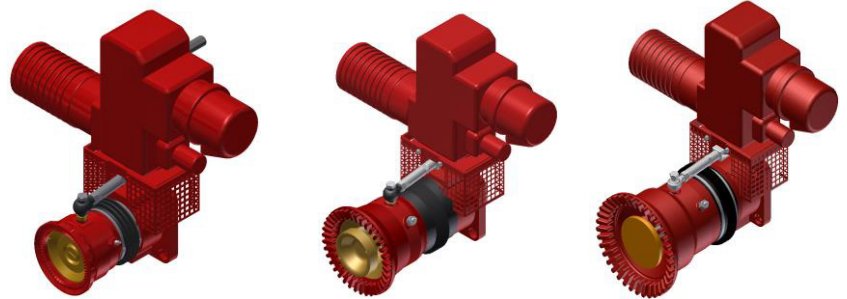


# Monsoon Remote Control Nozzle

## AMNC



The Angus Monsoon AMNC is an electric remote-controlled nozzle used as a flow pattern regulating device on firefighting monitors and capable to project flows of water or water/ foam in full jet or fog condition. The nozzle can be adjusted from full jet to fog stream via an electric actuator located on the external nozzle body. The electric actuator moves the nozzle to alter angle of the flow of water or water/ foam. At constant pressure, the flow remains constant, but the jet geometry varies from full jet to a fog stream. The AMNC nozzle is available with three different connections: square flanged SF125, SF150, ANSI 150 or F.BSP for connection with monitors of 2 1/2", 3" and 4".

The Angus Monsoon AMNC material of construction available varies from bronze alloys to stainless steel making the nozzle suitable for use with sea water or water foam solution within industrial harsh environments & offshore applications.

### Technical Characteristics

Body material options include:

- Bronze EN 1982 – CC491K
- Stainless Steel AISI 316

Inner parts in stainless steel AISI 316 and brass

Mechanical continuous position indicator with quadrant

Connection:

- SF 125
- SF 150
- 6" ANSI 150
- F. BSP

Suitable for installation in harsh and marine environments, and for use with sea water and foam solutions  
Design pressure: 16 bar (232 psi)

### Actuator

FOG/JET movement driven by electric actuator ATEX II 2 G Ex d e IIC T4, Emergency manual controls for both movements, with disengageable safety hand wheel (does not rotate during operation)

Anticondensation Resistor

Mechanical continuous position indicator with quadrant

Colour Grey RAL 7037

### Painting System Standard:

See Monsoon monitor paint specification data sheet  
Colour red RAL 3000

### Conventional actuators

#### 400 V ac Version: (BNE40050)

- FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 400 V 3Ph 50 Hz – 0,03 Kw – IP 67. Equipped with N° 2 torque limit contacts (NO/NC) and N° 2 limit switch (NO/ NC)

#### 400 V ac SIL2 Version: (BNES40050)

- FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 400 V

# Monsoon Remote Control Nozzle - AMNC

3Ph 50 Hz – 0,03 Kw – IP 67. Equipped with N° 2 torque limit contacts (NO/NC) and N°2 limit switch (NO/NC)

- System: Type A
- Operation Low demand
- HFT = 0
- 4,57E-03 < PFD Avg < 6,39E-03 depending on diagnostic test frequency
- TI = 1 year
- Data are referred to the assembly Actuators + Monitors

#### 480 V ac Version: (BNE48060)

- FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 480 V 3Ph 60 Hz – 0,03 Kw – IP 67. Equipped with N° 2 torque limit contacts (NO/NC) and N°2 limit switch (NO/NC)

#### 230 V ac Version: (BNE23050)

- FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 230 V 1Ph 50 Hz – 0,115 Kw – IP 67. Equipped with N° 2 torque limit contacts (NO/NC) and N°2 limit switch (NO/NC)

#### 24 V dc Version: (BNE24)

- FOG/JET movement driven by an electric's actuators ATEX II 2 G Ex d e IIC T4, supply voltage 24 V – 0,13 Kw – IP 67. Equipped with N° 2 torque limit contacts (NO/NC) and N°2 limit switch (NO/NC)

#### Auma Matic Actuators

FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4.

Equipped with:

N° 1 encoder calibration control unit MWG connected with AUMATIC control unit for:

- Open/Close Position indication
- Torque limitation
- Position Transmitter
- Intermediate status signals

N° 1 integral control AUMATIC with microprocessor and serial interface Profibus including:

- Electric and mechanical interlock connectors
- Outlet Voltage 24 VCC max 100 mA (galvanic isolated)

- N° 1 Analogue input 0/4-20 mA for percentual position of the valve
- N° 1 Analogue output 0/4-20 mA with galvanic segregation (max. load 500 ohm) for position indicator. (optional)
- N° 1 Analogue output 0/4-20 mA with galvanic segregation (max. load 500 ohm) for torque measurement
- N° 6 digital input 24 V available for: Open-Close-Stop
- ESD Programmable
- Mode-Interface for selecting input priorities
- Interface board Profibus
- Non-intrusive position selector Local/off/Remote, lockable in each position.
- Non-intrusive local push-buttons Open-Stop-Close-Reset with 6 LED for indication.
- Graphic Display indicating programming parameters and data visualisation
- Bluetooth Interface

Anti-condensation Resistor  
Mechanical continuous position indicator with quadrant

#### 400 V ac Version: (BNEM40050)

- FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 400 V 3Ph 50 Hz – IP 67.

#### 480 V ac Version: (BNEM48060)

- FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 480 V 3Ph 60 Hz – IP 67.

#### 230 V ac Version: (BNEM23050)

- FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 230 V 1Ph 50 Hz – IP 67.

#### Profibus actuators:

FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4.

Equipped with:

N° 1 encoder calibration control unit MWG connected with AUMATIC control unit for:

- Open/Close Position indication
- Torque limitation

- Position Transmitter
- Intermediate status signal

N° 1 integral control AUMATIC with microprocessor and serial interface Profibus including:

- Electric and mechanical interlock connectors
- Outlet Voltage 24 VCC max. 100 mA (galvanic isolated)
- N° 1 Analogue input 0/4-20 mA for percentual position of the valve
- N° 1 Analogue output 0/4-20 mA with galvanic segregation (max. load 500 ohm) for position indicator
- N° 1 Analogue output 0/4-20 mA with galvanic segregation (max. load 500 ohm) for torque measurement
- N° 6 digital input 24 V available for: Open-Close-Stop
- ESD Programmable
- Mode-Interface for selecting input priorities
- Interface board Profibus DP-V0 EN 50170 compliant
- Non-intrusive position selector Local/off/Remote, lockable in each position
- Non-intrusive local push-buttons Open-Stop-Close-Reset with 6 LED for indication
- Graphic Display indicating programming parameters and data visualisation
- Bluetooth Interface

Anti-condensation Resistor  
Mechanical continuous position indicator with quadrant

#### Profibus 415 V ac Version: (BNEPB)

FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 415 V 3Ph 50 Hz – IP 67.

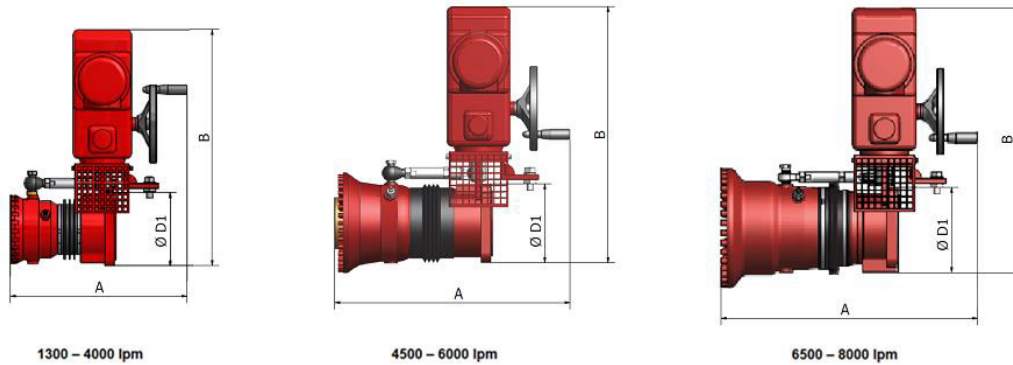
#### Profibus 480 V ac Version: (BNEPB48060)

FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 480 V 3Ph 60 Hz – IP 67

#### Profibus 230 V ac Version: (BNEPB23050)

FOG/JET movement driven by electric actuators ATEX II 2 G Ex d e IIC T4, supply voltage 230 V 1Ph 50 Hz – IP 67.

# Monsoon Remote Control Nozzle - AMNC



TYPE	Ø D1	A mm (inch)	B mm (inch)	Max. Flow rate (lpm(gpm) at 7 bar – 101.5 psi)														Weight kg (lb)
				1300 (350)	1500 (500)	2000 (600)	2500 (700)	3000 (750)	4000 (1000)	4500 (1100)	5000 (1250)	5500 (1350)	6000 (1500)	6500 (1600)	7000 (1750)	7500 (2000)	8000 (2100)	
1300-1400	F.BSP 2.1/2"	400 (15.7)	485 (19.1)	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	40 (88)
	FQ125 SF125	400 (15.7)	485 (19.1)	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	40.5 (89.1)
	FQ150 SF150	400 (15.7)	485 (19.1)	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	41 (90.2)
4500-6000	F.BSP 3"	450 (17.7)	485 (19.1)	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗	50 (110)
	FQ150 SF150	450 (17.7)	485 (19.1)	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗	50.5 (111.1)
6500-8000	F.BSP 4"	495 (19.5)	485 (19.1)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	58 (127.6)
	FQ150 SF150	495 (19.5)	485 (19.1)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	58.5 (128.7)
	ANSI 150 6"	495 (19.5)	485 (19.1)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	59 (129.8)

### Optional

Painting system different from Standard

For additional options or special versions contact Angus Fire

**EMERGENCY FOAM SERVICE** Call +44 (0) 15242 61166 – 24 hours a day, every day

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

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