



## **Installation, Operation & Maintenance Manual**



### **Stang 2.50" DC Electric Fog Nozzle 260220 Series**

2616 Research Drive Unit B  
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# 1. Introduction

The Stang DC electric nozzle is a 2.50" fog/ straight stream nozzle that allows the operation from a remote location. The nozzle is available in 12 or 24vdc with flow rates from 250-1000 gpm. The linear motion of the nozzle allows the nozzle to flow from fog to straight stream and back.

Specifications:

<b>WATER:</b>
<i>FLOW RATE: 250-1000 USGPM</i>
<i>PRESSURE RANGE: 50-150 PSI</i>
<i>OPTIMUM PRESSURE: 100PSI (INLET)</i>
<i>MAX. FOG ANGLE - 75°</i>
<b>ELECTRICAL:</b>
<i>INPUT VOLTAGE: 12/24VDC</i>
<i>CONT. CURRENT DRAW @ 12 VDC: .4 AMPS</i>
<i>CONT. CURRENT DRAW @ 24 VDC: .2 AMPS</i>
<i>MAX CURRENT DRAW @ 12 VDC: 3.4 AMPS</i>
<i>MAX CURRENT DRAW @ 24 VDC: 1.7 AMPS</i>
<b>MOUNTING:</b>
<i>2.5" (F)NH THREADED INLET</i>
<i>UNIT WEIGHT: 26 LBS</i>

Basic Configurations:

DASH NUMBER DEFINITIONS		
PART #	INPUT VOLTAGE	FLOW @ 100PSI
260220-12-1	12VDC	750 USGPM
260220-12-2	12VDC	500 USGPM
260220-12-3	12VDC	250 USGPM
260220-12-4	12VDC	1000 USGPM
260220-24-1	24VDC	750 USGPM
260220-24-2	24VDC	500 USGPM
260220-24-3	24VDC	250 USGPM
260220-24-4	24VDC	1000 USGPM

## 2. Equipment Shipment

These nozzles will be shipped in one of two ways.

1. Pre-Installed on the equipment. This is standard if purchased with monitor equipment.
2. Shipped separately. Will arrive packaged in a box.

Upon arrival make sure all items are accounted for and there is no damage.

## 3. Nozzle Pre-Installation

If the nozzle is already installed on equipment then ignore this step.

Prior to installation, make sure monitor system is dry (no water). Make sure control system is off.

Tools required for installation:

1. Spanner Wrench
2. General Electrical Tools

### **\*\*Warning\*\***

Installation should be conducted by qualified personnel only. Improper installation can be hazardous & deadly to property & life.

## 4. Installation

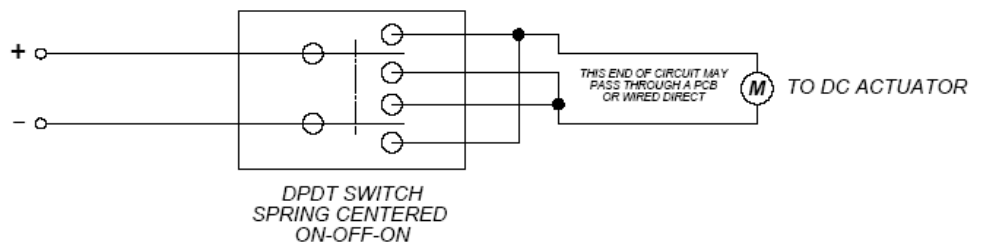
If the nozzle is already installed on equipment then ignore this step.

Make sure all Pre-Installation requirements have been met.

1. Screw on nozzle with spanner or strap wrench.
2. Route wiring to junction box or control center.
3. Wire up nozzle to junction terminals or control center.

This nozzle has mechanical travel limits built into the screw drive of the linear actuator. The nominal travel of the nozzle is 1.00". At either end of the travel, the actuator motor will keep on running. This is normal.

To reverse the actuator, the control system must reverse polarity. See schematic below for reference.



Make sure your supply voltage is the same as nozzle. Make sure your system can supply the correct current to power the device.

## 5. Start UP

System is still dry at this point. Operate control system nozzle actuation switch. When the switch is activated to the fog position, then the outer body sleeve of the nozzle will retract back.

When the switch is activated to the stream position then the outer body sleeve of the nozzle will extend forward.

If these motions are backward then reverse polarity either in the control system or at the nozzle.

Once both these movements work, turn on water for final testing.

## 6. System Maintenance

Nozzle is greased during the assembly and it is a sealed system.

It is advisable to inspect and grease once per year or every 40 hours of accumulated use. If in a corrosive or dusty area, cut this time in half.

You will need to remove the actuator from the nozzle. Only pull the bolts that hold the actuator in (the center bolts). Slide the body forward and remove the holding set screw.

The outer body will now slide off. At this point clean and re-grease.

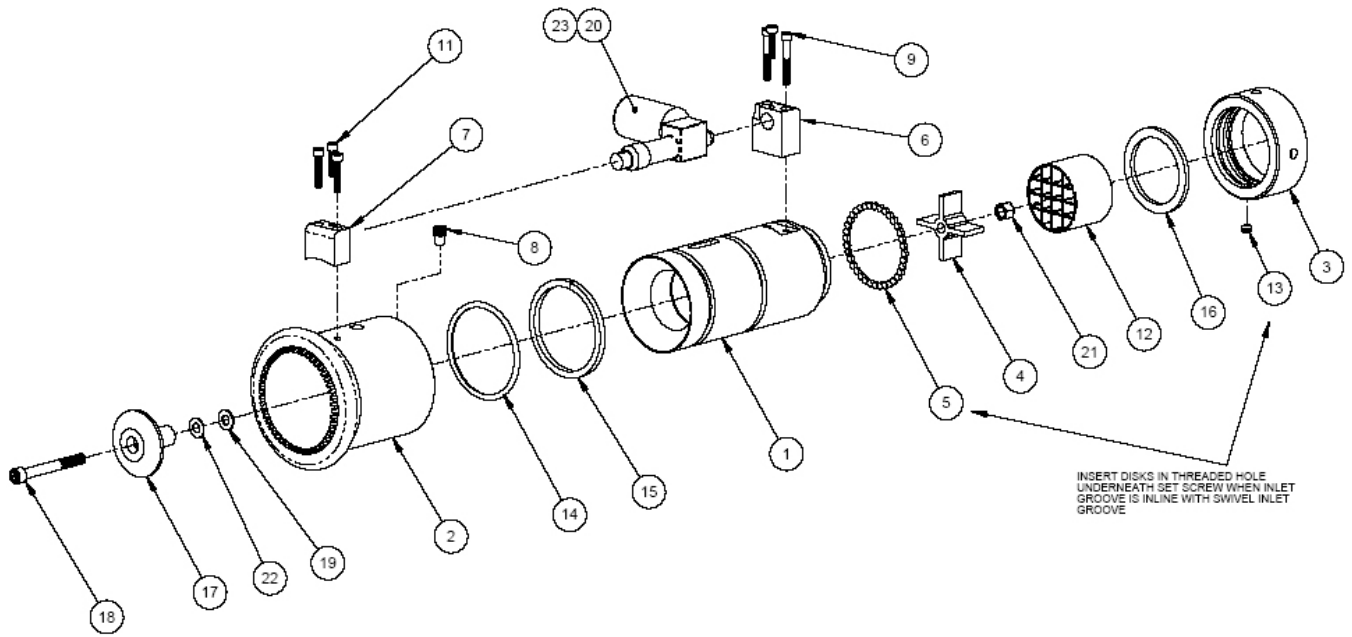
If your nozzle has a grease fitting then you can grease externally.

## 7. Storage

In the event that the system will need to be offline, it is advisable to disconnect power to system and or nozzle. It is also advisable to cap the end of the nozzle so debris or animals do not enter.

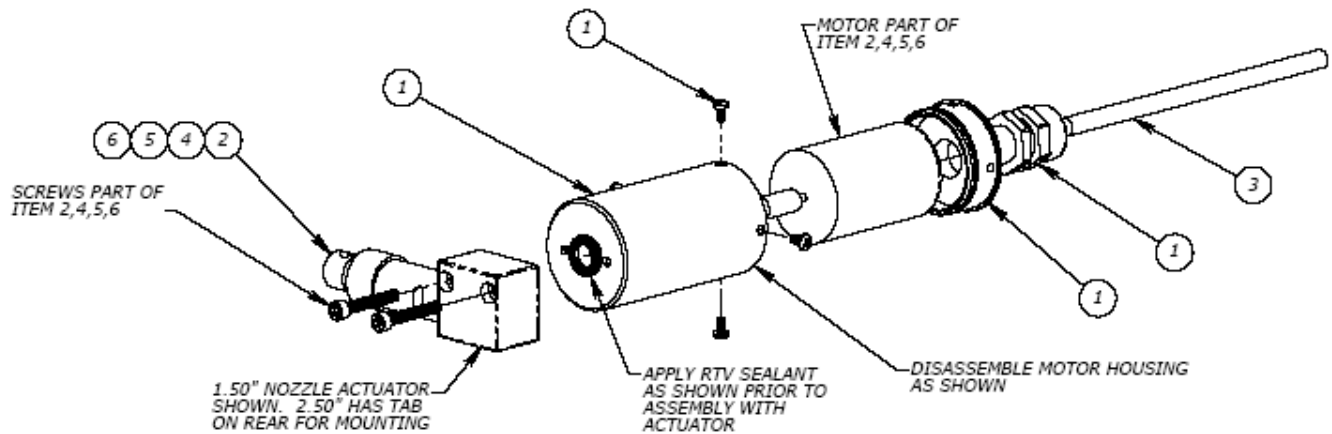
## 8. Exploded View

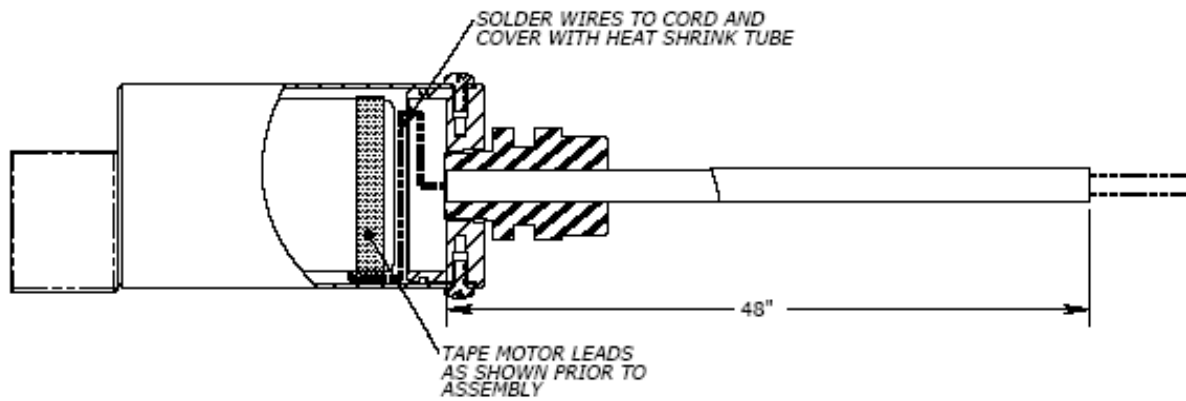
-	-	-	-	1	1	1	1	23	754330-24	ACTUATOR, LINEAR, 24V ( 100 LBS. DYN.)
-	1	-	1	-	1	-	1	22	260220-5	SPACER, POPPET (50GPM)
1	1	1	1	1	1	1	1	21	100249-11C	NUT, NYLOCK, 3/8-16UNC, 18-8
1	1	1	1	-	-	-	-	20	754330-12	ACTUATOR, LINEAR, 12V ( 100 LBS. DYN.)
5	2	1	7	5	2	1	7	19	260220-6	SPACER, POPPET (100GPM)
1	1	1	1	1	1	1	1	18	104036-325C	SCREW, SHC, 3/8-16UNC X 3.25L, 18-8
1	1	1	1	1	1	1	1	17	260163-11	POPPET, 2.50" ELECTRIC NOZZLE-ALUM
1	1	1	1	1	1	1	1	16	100275-1	GASKET, 2.5", NEOPRENE
1	1	1	1	1	1	1	1	15	100209-1	SEAL, DIRT, .25SQx11.0L,MF#31-F
1	1	1	1	1	1	1	1	14	100128-339	O-RING, AS568A-339, .188W X 3.260ID X 3.625OD, BUNA-N
1	1	1	1	1	1	1	1	13	102194-1	SCREW, SET, FP, 3/8-24UNF X .25LG., BRS
1	1	1	1	1	1	1	1	12	102496-3	RECTIFIER TURB, 2.5"
2	2	2	2	2	2	2	2	11	104032-100C	SCREW, SHC, 1/4-20UNC X 1.00L, 18-8
2	2	2	2	2	2	2	2	10	104032-125C	SCREW, SHC, 1/4-20UNC X 1.25L, 18-8
2	2	2	2	2	2	2	2	9	104032-175C	SCREW, SHC, 1/4-20UNC X 1.75L, 18-8
1	1	1	1	1	1	1	1	8	260162	GUIDE SCREW, 1/2-20 CRES
1	1	1	1	1	1	1	1	7	260220-4	PEDESTAL, FRONT ACT'R MOUNTING
1	1	1	1	1	1	1	1	6	260220-3	PEDESTAL, REAR ACT'R MOUNTING
36	36	36	36	36	36	36	36	5	100349-1	DISC, .25 X .125 LG. AL-BRZ
1	1	1	1	1	1	1	1	4	104378-11	SUPPORT, 2.50" NOZZLE CROSS-ALUM
1	1	1	1	1	1	1	1	3	260151	SWIVEL INLET, 2.50-7.5NH(F)-ALUM
1	1	1	1	1	1	1	1	2	260220-1	BODY, 2.50" ELECTRIC FOG NOZZLE-ALUM
1	1	1	1	1	1	1	1	1	260220-2	INLET, 2.50" ELECTRIC FOG NOZZLE-ALUM
-12-1 QTY	-12-2 QTY	-12-3 QTY	-12-4 QTY	-24-1 QTY	-24-2 QTY	-24-3 QTY	-24-4 QTY	ITEM NO.	PART NUMBER	DESCRIPTION



## 9. Applicable Data

Newer versions of this nozzle have a heavy duty actuator motor cover. This data reflects these components. This option is part number 385466.





385466-11-24	ACTUATOR, 24V LINEAR W/HOUSING FOR 2.50" NOZZLE
385466-11-12	ACTUATOR, 12V LINEAR W/HOUSING FOR 2.50" NOZZLE
385466-1-24	ACTUATOR, 24V LINEAR W/HOUSING FOR 1.50" NOZZLE
385466-1-12	ACTUATOR, 12V LINEAR W/HOUSING FOR 1.50" NOZZLE
PART NO.	DESCRIPTION
CONFIGURATIONS	

1	-	-	-	6	85615-274	ACTUATOR, 24VDC LINEAR, 100 LBS DYN.
-	1	-	-	5	85615-273	ACTUATOR, 12VDC LINEAR, 100 LBS DYN.
-	-	1	-	4	85615-24	ACTUATOR, 24VDC LINEAR, 100 LBS DYN.
1	1	1	1	3	783005-162	CORD, SJOOW, 16AWG X 2WIRE X 48.00L-BLACK
-	-	-	1	2	85615-12	ACTUATOR, 12VDC LINEAR, 100 LBS DYN.
1	1	1	1	1	385422-1	HOUSING, NOZZLE ACTUATOR MOTOR-ALUM
-11-24/QTY.	-11-12/QTY.	-1-24/QTY.	-1-12/QTY.	ITEM NO.	PART NO.	DESCRIPTION

Disclaimer: This advice is given in good faith but not without liability