

# NJEX® Odorant Injection System

## Models 8300 and 8302

NJEX 8300 and 8302 odorant injection systems inject precise amounts of liquid odorant into cubic feet or meters of gas that flows down a pipeline to ensure detectability. Designed for high-volume applications, these odorizers provide proportional-to-flow odorant injection, onboard metering of the odorant injected, system monitoring and alarm notification. Additionally the system will document and verify the performance of each system component, parameter changes, alarms and injection rates. Available in a single or dual-unit configuration, the systems are capable of accurately injecting up to 257 liters/day (68 gallons/day).

## Features and Benefits

- Patented, pneumatically-actuated, positive-displacement reciprocating plunger pump
- Teflon diaphragm isolates all dynamic seals from the odorant
- 257 liters/day (68 gallons/day) maximum odorant output
- Versatile, electronic controller for proportional-to-flow or time-based operation
- Real-time system monitoring and alarm notifications
- Remote communication via ModBus or Sentry4 Software
- Intrinsically safe electronics
- Single or Dual Configuration to meet application requirements
- Weatherproof enclosure for protection from the elements

## Specifications

Maximum odorant output		257 liters/day (68 gallons/day)
Maximum operating pressure		99.28 bar (1,440 psig)
Operating temperature range		17°C to 60°C (0°F to 140°F) <sup>1</sup>
Power supply		
	Standard	SPS-12 solar panel
	Optional	LPS 120/240 volt, 50/60 Hz AC charger
Battery reserve		Approximately 30 days
Gas flow rate input signal		1-5 VDC, 4-20 mA or pulse

<sup>1</sup>At temperatures below 0°C (32°F) conditioning of the actuation gas supply may be required.



## System Flow Schematic

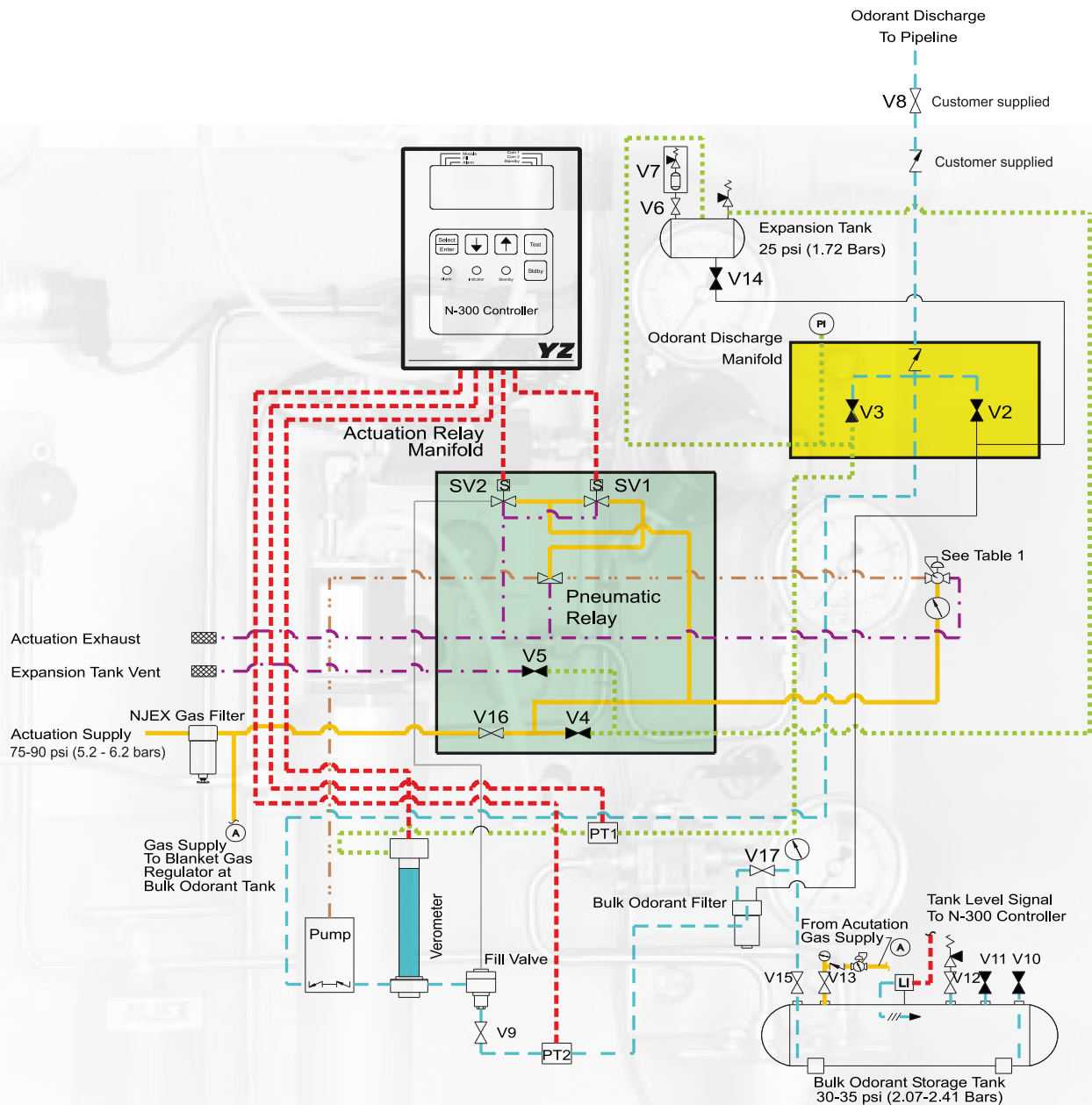


Table 1	
8300	
Pipeline Pressure	Actuation Pressure
200-400psi (13.89-27.6Bar)	40psi (2.76Bar)
400-600psi (27.6-41.4Bar)	50psi (3.45Bar)
600-800psi (41.4-55.2Bar)	60psi (4.14Bar)
800-1000psi (55.2-68.9Bar)	70psi (4.83Bar)
1000-1300psi (68.9-89.6Bar)	80psi (5.52Bar)
1300-1500psi (89.6-103.4Bar)	90psi (6.21Bar)

IMPORTANT: Read And Follow Steps 1-4 BEFORE Proceeding																
	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17
1. Place the controller in the "standby" mode.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Close all valves marked "X".	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. Open all valves marked "O".	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
4. Place controller in the proper mode of operation as needed.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5. Open to build pressure to 60 psi (4.14 Bars) then close valve	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
* Adjust as needed	X	O	X	X	O	X	X	X	X	X	O	O	X	O	O	O

	Normally Closed Valve		Liquid Odorant - Normal Operation	V2	Purge Valve (Red Knob)	V11	Odorant Storage Tank Vapor Return Valve	SV2	Fill Valve
	Normally Open Valve		Purge/Drain Line	V3	Prime Valve (Blue Knob)	V12	Odorant Storage Tank Pressure Transmitter	PT1	Expansion Tank Pressure Transmitter
	Pneumatic Relay		Expansion Line	V4	Expansion Tank Pressure Supply Valve (Gold Knob)	V13	Odorant Storage Tank Blanket Gas Isolation Valve	PT2	Odorant Inlet Pressure Transmitter
	Check Valve		Intrinsically Safe Electrical Line	V5	Expansion Tank Vent Valve (Green Knob)	V14	Expansion Tank Drain Valve		
	Float Valve		Exhaust/Vent Line	V6	Expansion Tank Overflow Preventor Isolation Valve	V15	Odorant Storage Tank Supply Isolation Valve		
	Pressure Gauge		Actuation Line 75 psi (520 Kpa)	V7	Expansion Tank Overflow Preventor Isolation Valve	V16	Gas Supply Isolation Valve (Black Knob)		
	Electronic Level Transmitter		Fill Valve Actuation Line	V8	Isolation Valve	V17	System Odorant Supply Isolation Valve		
	Solenoid Valve		Pump Actuation Line	V9	Fill Rate Control Valve	SV1	Pump Actuation Pilot Solenoid Valve		
	Pressure Regulator w/Gauge			V10	Odorant Storage Tank Fill Valve				
	Pressure Relief Valve								
	Pressure Transmitter								