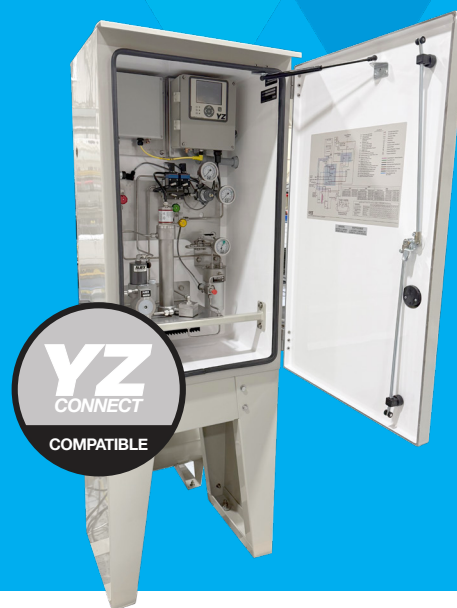


NJEX[®] Odorant Injection System

Models 8400 and 8402

NJEX 8400 and 8402 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

Specification

Maximum odorant output	257 liters/day (68 gallons/day)
Maximum operating pressure	99.28 bar (1440 psig)
Operating temperature range	-20°C to 60°C (0°F to 140°F) ¹
Power supply	
Standard	Customer Supplied Intrinsically Safe 24VDC
Optional	EPO 120/240 VAC, 50/60 Hz supply
Battery reserve (both standard & EPO)	Approximately 14 days ² . Non-rechargeable lithium battery
Gas flow rate input signal	1-5 VDC, 4-20 mA or pulse

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

²Dependent on ambient temperature and stroke rate.

System Schematic

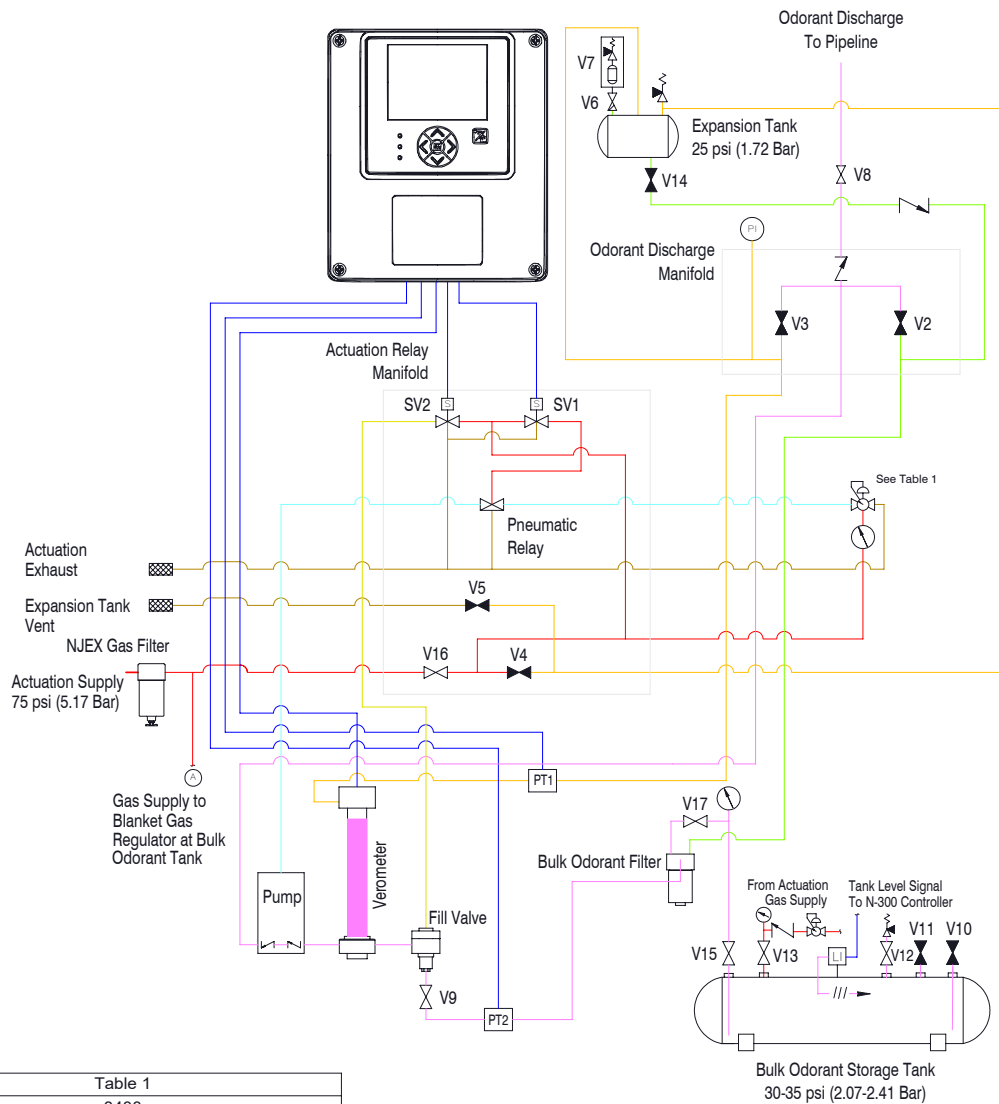


Table 1		
8400		
Pipeline Pressure	Actuation Pressure	Supply Pressure
200-400 psi (13.8-27.6 Bar)	40 psi (2.76 Bar)	75 psi (5.17 Bar)
400-600 psi (27.6-41.4 Bar)	50 psi (3.45 Bar)	75 psi (5.17 Bar)
600-800 psi (41.1-55.2 Bar)	60 psi (4.14 Bar)	75 psi (5.17 Bar)
800-1000 psi (55.2-68.9 Bar)	70 psi (4.83 Bar)	75 psi (5.17 Bar)
1000-1300 psi (68.9-89.6 Bar)	80 psi (5.52 Bar)	90 psi (6.21 Bar)
1300-1440 psi (89.6-99.3 Bar)	90 psi (6.21 Bar)	90 psi (6.21 Bar)

LEGEND

	Normally Closed Valve		Liquid Odorant - Normal Operation
	Normally Open Valve		Purge/Drain Line
	Pneumatic Relay		Expansion Line
	Check Valve		Intrinsically Safe Electrical Line
	Float Valve		Exhaust/Vent Line
	Pressure Gauge		Actuation Line 75 psi (5.17 Bar)
	Electronic Level Transducer		Fill Valve Actuation Line
	Solenoid Valve		Pump Actuation Line
	Pressure Regulator w/Gauge		See Table 1
	Pressure Relief Valve		
	Pressure Transducer		

IMPORTANT: Read And Follow Steps 1-4 BEFORE Proceeding

- Place the controller in the "standby" mode.
 - Close all valves marked "X".
 - Open all valves marked "O".
 - Place controller in the proper mode of operation as needed.
- - Open to build pressure to 60 psi (4.14 Bar) then close valve
* - Adjust as needed

	V2	V3	V4	V5	V6	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17
Normal Operation	X	X	X	X	O	O	*	X	X	O	O	X	O	O	O
System Purge	O	X	●	X	X	X	*	X	X	O	O	X	O	O	O
System Vent	O	O	X	O	X	X	*	X	X	O	O	X	O	O	X
Leak Test	O	O	O	X	X	X	*	X	X	O	O	X	O	O	X
Prime Pump	X	O	X	X	O	X	*	X	X	O	O	X	O	O	O

V2	Purge Valve (Red Knob)
V3	Prime Valve (Blue Knob)
V4	Expansion Tank
V5	Pressure Supply Valve (Gold Knob)
V6	Expansion Tank Vent Valve (Green Knob)
V7	Expansion Tank Overflow Preventor Isolation Valve
V8	Expansion Tank Overflow Preventor Isolation Valve
V9	Fill Rate Control Valve
V10	Odorant Storage Tank Fill Valve
V11	Odorant Storage Tank Vapor Return Valve

V12	Odorant Storage Tank Relief Valve Isolation Valve
V13	Odorant Storage Tank Blanket Gas Isolation Valve
V14	Expansion Tank Drain Valve
V15	Odorant Storage Tank Supply Isolation Valve
V16	Gas Supply Isolation Valve (Black Knob)
V17	System Odorant Supply Isolation Valve
SV1	Pump Actuation Pilot Solenoid Valve
SV2	Fill Valve Solenoid Valve
PT1	Expansion Tank Pressure Transmitter
PT2	Odorant Inlet Pressure Transmitter