

# Nitrogen Blanketing System for Ultra Pure RO/DI Water Storage - with up to 100m<sup>3</sup>/h flow capacity



Can be combined with following options

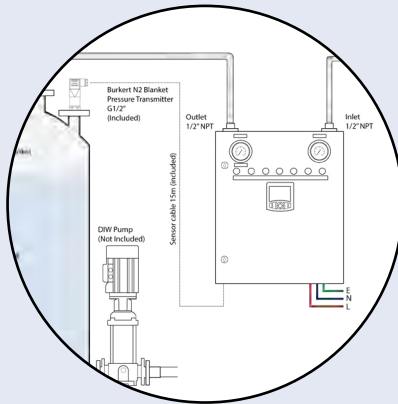


**Type 8020/30**  
Paddle-wheel flow sensor  
(for flow)

**Type 8008**  
N2 Flow Meter  
(for N2 consumption)

**Type 8802-YG/ DF**  
Control Valve  
(for continuous level control- reduces N2 usage)

**Type 3323**  
Fully Electric Driven Electro-motive Control Valve



- Unique system for plug & play, easy installation & operation
- Suitable for wide & dynamic flow profile
- Tank level control / flow monitoring available
- High control accuracy
- Ultra low maintenance
- Customised version available on request

This is Bürkert's N2 blanketing pressure control solution for storage tanks. The compact control panel is specially designed for easy installation, commissioning and operation.

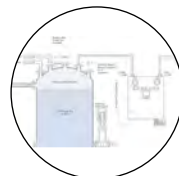
The system consists of Bürkert high accuracy pressure transmitter, unique 8619 multichannel, multifunction transmitter/controller with built-in PID controller, proportional solenoid control valve with excellent dynamics and turn-down ratio, customised control panel and pressure/vacuum relief breather valve for secondary tank protection.

Thanks to the modularity of Type 8619 in hardware and software, we can offer different type of systems to meet various requirements.

- Basic N2 Blanket System
- N2 Blanketing System with Level Control
- N2 Blanketing System with Flow Monitoring
- N2 Blanketing System with Tank Level Control and Flow Monitoring

Bürkert N2 flowmeter can be configured to measure N2 gas flow rate and consumption. Type 8619 multiCELL has optional data logger function (which can be added in the future) records up to 16 process values/ event alarms.

## Content



**Basic**  
Type [8619](#) + [8325](#) + [Breather valve](#)

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Request for quote.

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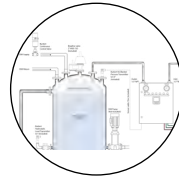


**Flow**  
Type [8619](#) + [8325](#) + [8020/ 8030](#) + [Breather valve](#)

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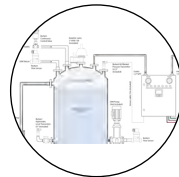


**Level**  
Type [8619](#) + [8325 X 2](#) + [Breather valve](#) + [8802-YG/DF \(optional\)](#) + [3323 \(optional\)](#)

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**Flow-Level**  
Type [8619](#) + [8325 X 2](#) + [8020/ 8030](#) + [Breather Valve](#) + [8802-YG/DF \(optional\)](#) + [3323 \(optional\)](#)

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**Technical Data**

<b>Control panel</b>	
Operating voltage/ Consumption	100 - 240VAC 50/60 Hz, 250W
Panel material	Powder coated mild steel, other on request
Mounting / Size	Wall, 600 x 500 x 250 mm (H x W x D)
N2 gas supply (bar)	up to 16 bar
N2 gas inlet/ outlet port connection	NPT 1/2" Female thread
N2 gas outlet port connection	NPT 1/2" Female thread
Electrical connection	PG 13.5 cable glands
Protection	IP 55, IP 65 on request

<b>Pressure transmitter / Hydrostatic level transmitter 8325</b>	
Measuring range	0-0.1 bar for N2 pressure/ Up to 5000 mm WC for tank level
Wetted material	SS 1.4571 (316Ti)
Process connection	G 1/2" for tank N2 pressure measurement G1" flush diaphragm for tank water level measurement
Output signal	4- 20 mA, 2 wires
Protection	IP 65

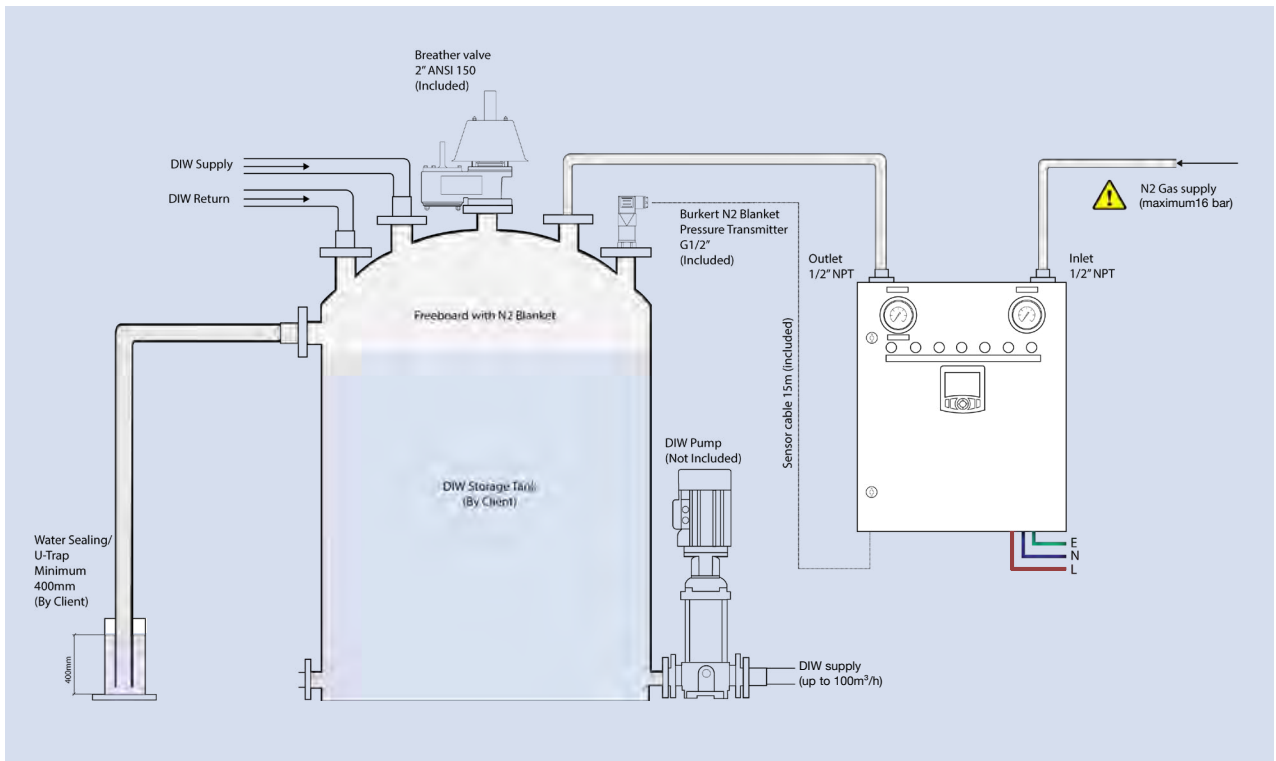
<b>8619 multiCELL</b>	
Operating voltage	24V DC (from control box)
Signal input	4-20 mA, pulse etc. depends on configuration
Signal output	4-20 mA, PWM etc. depends on configuration (Profinet, Ethernet/IP, modbus TCP on request)

<b>Solenoid control valve</b>	
Body / seal material	Brass / FKM, SS on request
Port connection	NPT 1/4" or 1/2"
Operating voltage	24V DC

<b>Breather valve (for tank protection)</b>	
Body / Trim / Diaphragm	Aluminium / SS 304 / PTFE
Size / Port connection	2" / ANSI 150LB RF flange
Set pressure	+350 mm / -50 mm WC

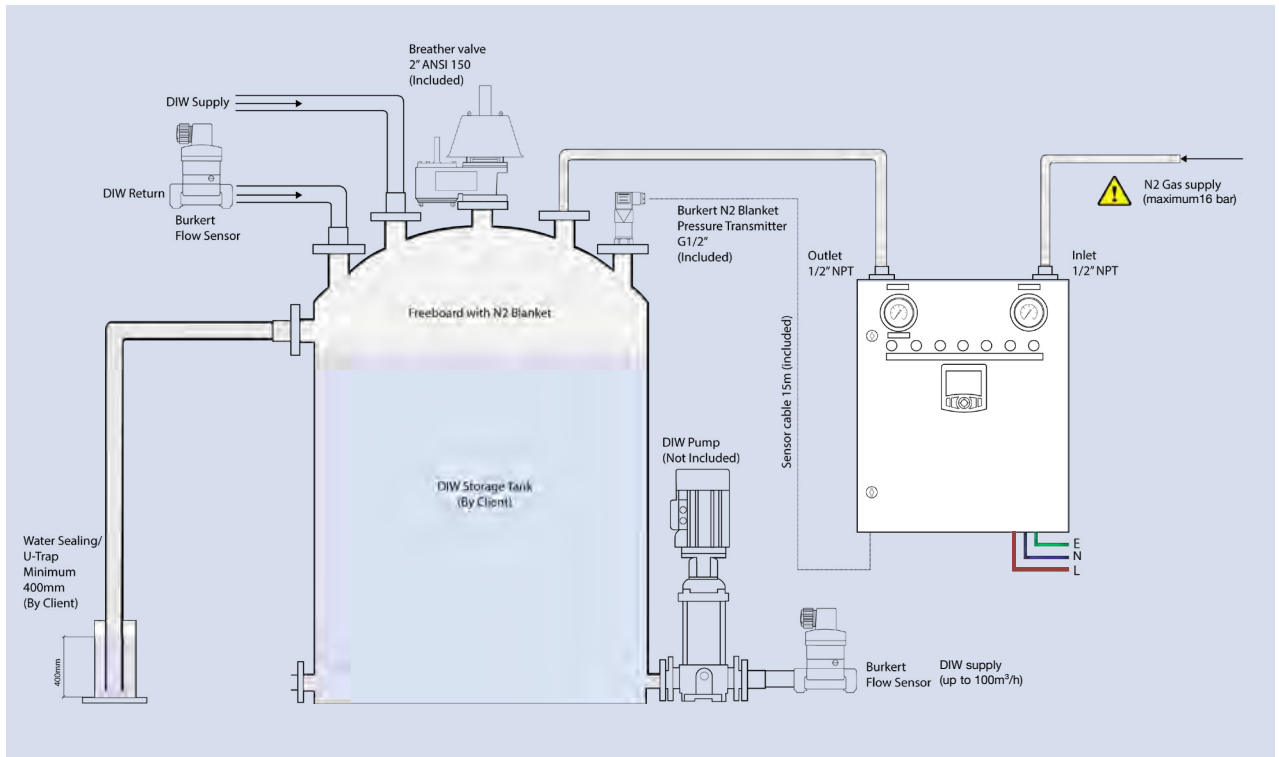
**System N2-8619**  
**N2 Blanketing System**

**Basic N2 blanketing system 97180063**



**N2 blanketing system with flow monitoring 97180065**

Flow monitoring for DI water supply & return pipes enables monitoring of actual water usage.  
 Flow sensor / fitting to be ordered separately.  
 Please refer to Type S030 / 8030 / 8020 / S020 data sheets for flow sensor selection.



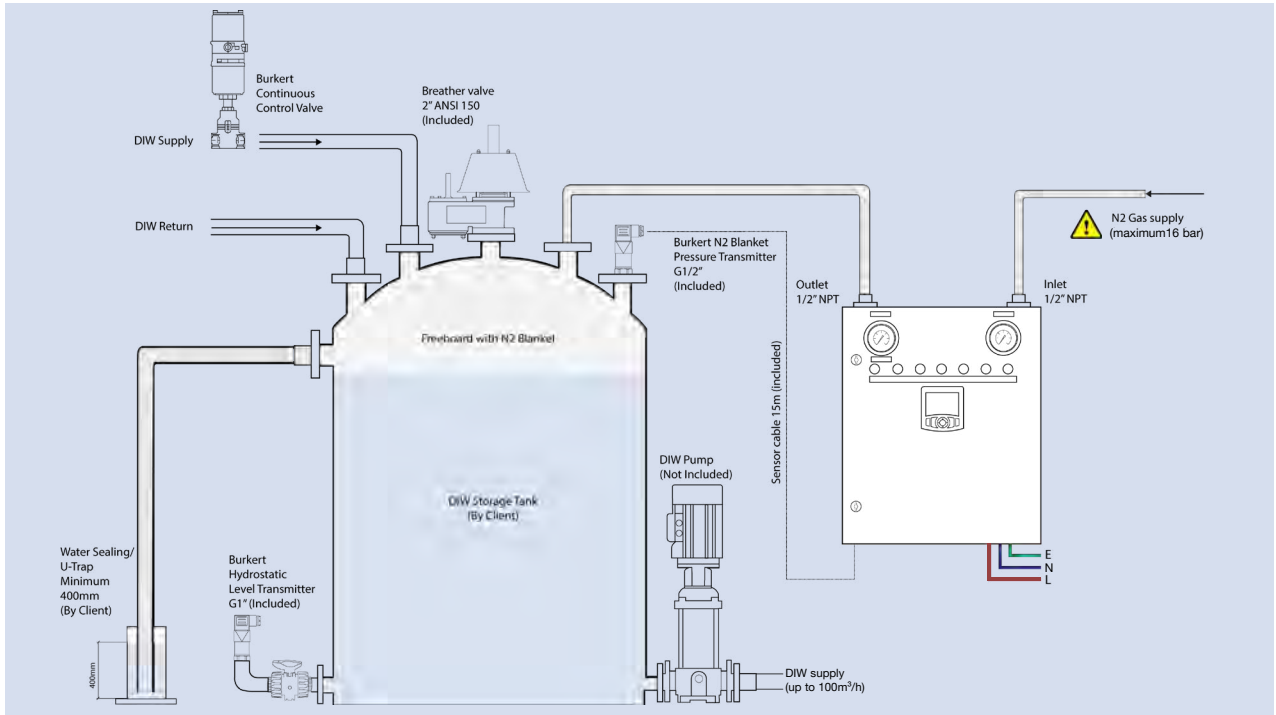
# System N2-8619 N2 Blanketing System



## Basic N2 blanketing system with level control 97180067

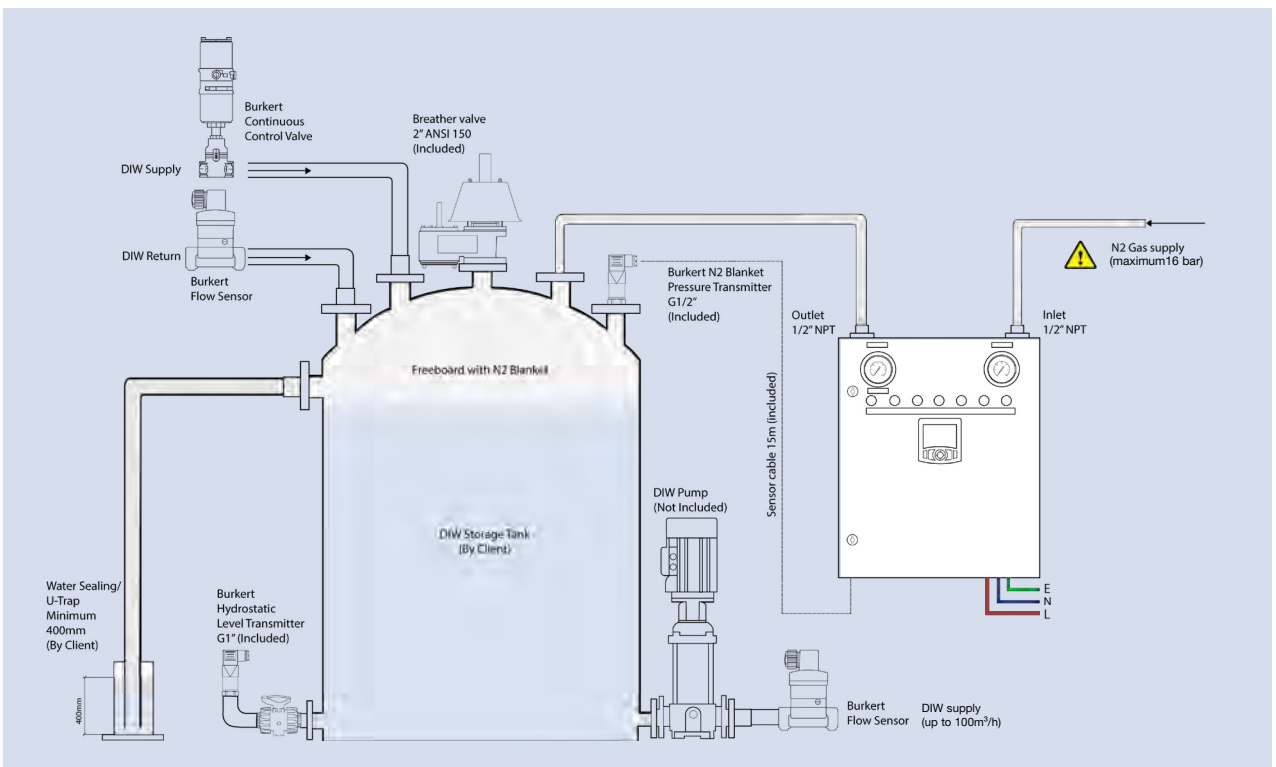
N2 blanketing panel with integrated tank level control. Actual tank level is measured via differential pressure.  
4x On/Off Output for Tank Auto Top-Up & DI Water Supply Pump Control and Pump Protection. If Continuous Control Valve is installed instead of On/Off valve to maintain tank level - significant reduction of N2 gas consumption and further improvement of water quality due to less start/stop, can be expected.

Hydrostatic level transmitter Type 8325 equipped with flush diaphragm to eliminate dead leg.  
Both valve and level transmitter need to be ordered separately. Please refer to [Type 8802](#), [Type 3323](#) and [Type 8325](#) data sheet for selection.



## N2 blanketing system with flow monitoring and level control 97180069

Flow monitoring for DI water supply & return pipes enables monitoring of actual water usage.  
Modulating valve to maintain tank level - reduces N2 consumption and improves water quality due to less start / stop.  
Flow sensor / fitting, hydrostatic level transmitter Type 8325 and Type 8802 / 3323 control valve to be ordered separately.  
Please refer to Type S030 / 8030 / 8020 / S020, Type 8325 and Type 8802 / 3323 data sheets for selection.



**N2 blanketing system – request for quotation**

Please fill out and send to your nearest Bürkert facility\* with your inquiry or order

Company	Contact person
Customer no.	Department
Address	Tel./Fax
Postcode/town	E-Mail

**Operating data**

Supply voltage	115 / 230V AC 50 / 60Hz		
Outgoing flow rate	gpm(US)		m <sup>3</sup> /h
Incoming flow rate	gpm(US)		m <sup>3</sup> /h
Return flow rate	gpm(US)		m <sup>3</sup> /h
Distance from top of tank to location of panel	feet		meter

**Tank / Pipe detail**

Tank material	FRP	SS304	SS306	Other
Tank height ( standard up to 5m )		feet		meter
Tank diameter		feet		meter
Pipe size	Outgoing		Incoming	
	Inch	mm	Inch	mm
	Return			
	Inch	mm		
Pipe material	PVC	PVDF	PP	SS

**Digital Communication Interface (optional)**

Ethernet protocols	EtherNet/IP	Modbus TCP	PROFINET
UL certification	Yes	No	