542 Series High Flow Backup

The 542 Series High Flow Back-Up is designed to provide a “smart" reserve supply to high flow gas generators or bulk supply systems. If there is a loss of power, or if the gas generator or bulk supply system cannot provide sufficient gas, the 542 Series will automatically activate the reserve supply to supply gas without interruption. The unique feature of the 542 is that these functions are controlled by an on board micro-processor. In addition to the on board systems, the 542 is equipped with web server technology allowing for remote monitoring and control functions. Together, these advanced systems continually monitor pipeline pressure and reserves and can be programmed to engage at a specific pressure. The 542 is available for nitrogen, oxygen, air, helium, carbon dioxide, nitrous oxide, or argon in high purity barstock brass construction.

Typical Applications

- Bulk or Microbulk Backup Supply
- Air or Nitrogen Generator Backup
- Cell Culture Incubators and IVF
- Critical Laboratory Gas Reserve
- Gas Chromatography, Flame Ionization Detector, and Mass Spectrometer Backup

Features

Programmable Setpoint Pressure permits the user to set the back-up to engage at a specific pressure

Programmable Inlet Alarm Pressure allows user to set a low reserve alarm point

Onboard Web Server Technology enables real-time, online system monitoring

High Flow Capacity supports building or facility systems

Check Valve on Primary and Reserve prevents backflow to either

Materials and Specifications

Maximum Primary Source Pressure: 15-120 PSIG (1-8 BAR); 15-250 PSIG (1-17 BAR)

Temperature range: 0°F to 140°F (-18°C to 60°C)

Helium leak integrity: 1 x 10^{-8} scc/sec 316L stainless steel or brass barstock

Cv: 1.0

Regulator Body: Brass barstock

Bonnet: Chrome-plated, die-cast zinc

Seat: PCTFE

Filter: 40-micron 316 mesh

Regulator Diaphragm: 316L stainless steel

Check Valve Seats: Chloroprene

Enclosure: NEMA 12, Powder-coated steel

Weight: 45 lbs (20.45 kg)

Conformances: ANSI/ASME B40.1; CRN OH17950.5

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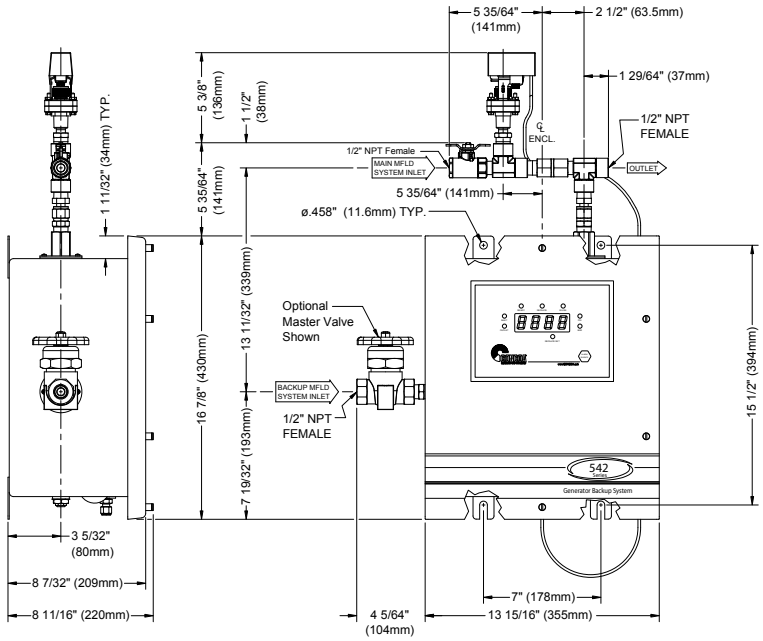
Installation Dimensions



Ordering Information

542	A	B	C	D	-CON	Stations
Series 542	Delivery Pressure	Inlet Options	Internal Buzzer Audible Alarm	Voltage/Web Server Assembly Options	Gas Service Cylinder Connections	
	3: 0-120 PSIG (0-8 BAR)	**0:** 1/2" FPT	**0:** Without alarm	**4:** 120 VAC / with web server	**-000:** No cylinder connection	**0:** No hoses
	5: 0-250 PSIG (0-17 BAR)	**1:** Master valve 1/2" FPT	**1:** With alarm	**5:** 240 VAC / with web server	**-296:** Oxidizing mixtures (O^2 > 23.5%)	**1:** 1 station
		2: MicroManifold without hoses			**-320:** Carbon Dioxide	**2:** 2 stations
		3: MicroManifold with 36" (900mm) stainless flexible hoses			**-326:** Nitrous Oxide	**3:** 3 stations
		4: MicroManifold with 72" (1800mm) stainless flexible hoses			**-346:** Breathable air	**4:** 4 stations
		5: Master valve with MicroManifold without hoses			**-540:** Oxygen	**5:** 5 stations
		6: Master valve with MicroManifold with 36" (900mm) stainless flexible hoses			**-580:** Inert (Argon, Helium, Nitrogen)	**6:** 6 stations
		7: Master valve with MicroManifold with 72" (1800mm) stainless flexible hoses			**-590:** Synthetic air (dry, zero grade, ultra zero grade)	**7:** 7 stations
		C: High flow manifold, single row, without hoses			*DIN 477 BS 341 and others available*	**8:** 8 stations
		D: High flow manifold, single row, with 36" (900mm) stainless flexible hoses				
		E: High flow manifold, single row, with 72" (1800mm) stainless flexible hoses				
		F: High flow manifold, dual row, without hoses				
		G: High flow manifold, dual row, with 36" (900mm) stainless flexible hoses				
		H: High flow manifold, dual row, with 72" (1800mm) stainless flexible hoses				