

# Electronic ChangeOver Systems

## Model 8404E

This fully automatic changeover manifold controls gas delivery from two independent banks of cylinders. Changeover between banks occurs automatically when one bank is depleted, ensuring a continuous and uninterrupted supply of gas and eliminating the need to manually reset levers or valves. The 8404E also features an integrated circuit that electronically monitors and displays cylinder bank pressure as well as delivery pressure.



### Benefits/Features

Micro controller monitors all functions and controls changeover.

Easily accommodates future cylinder expansion with addition of header extensions.

Standard audible/visual alarm.

Check valves prevent discharge of gas from pigtails when changing cylinders.

### Specifications

**Inlet Pressure:** 3000 psig (207 bar) maximum

**Operating Temperature Range:**  
0°F to 140°F (-18°C to 60°C)

**Flowrate:** 1200 SCFH at 225 psig (16 bar) of air maximum

**Inlet Port:** 1/2" NPT Female

**Outlet Port:** 1/2" NPT Female

**Regulator Helium Leak Rate:** 1x10<sup>-8</sup> SSCM

#### Enclosures:

Control: Fiberglass, NEMA 4X, light gray color

Mechanical: Steel, powder-coated, NEMA 1, light gray

#### Electrical/International Power Range:

90-264V AC single phase, 50-60 Hz, 1 amp

#### Pressure Sensors:

Transducers, stainless steel internals

#### Weight:

Controller: 5 lbs. (2.3 kg)

Enclosure: 25 lbs. (11.3 kg)

### Materials of Construction

#### Regulator Bodies:

Brass: High-purity bar stock

Stainless Steel: High-purity bar stock

**Pigtail:** 24" stainless steel flexible pigtail with brass or 316L Stainless Steel CGA connections as appropriate

**Diaphragm:** Stainless steel

**Seats:** PCTFE

**Seals:** PTFE

**Bonnet:** Painted zinc

Model 8404E		Delivery Pressure Range	
		psig	bar
Brass	Stainless Steel		
Q8404EB-(*)-(2**)	Q8404ES-(*)-(2**)	10 – 225	0.7 – 16

\* Replace with CGA from table below.

\*\* Each unit comes with 2' pigtails with integral check valves. Longer lengths are available – please contact your Air Liquide representative.

Gas Service	CGA Connection†	Code
Air	590	A5
Argon, helium or nitrogen	580	N2
Carbon dioxide	320	CD
Nitrous oxide	326	N3

† Other cylinder connections are available.

For applications involving flammable gas or oxygen service – please contact your Air Liquide representative.

### Optional Equipment

Flow limit shutoff valves

Pressure relief valves