

# COSE

## ChangeOver System Continuous Gas Management



### Value Proposition:

The ChangeOver System (COSE) is a compact turnkey module that assists the operator with their total gas management. The COSE maintains a continuous gas delivery from two separate sources allowing for maximum cylinder gas usage from one source before automatically switching to the second source. The COSE lowers specialty gas costs by maximizing the consumption of gas from each cylinder. In addition, the gas cylinder bank(s) can be monitored remotely utilizing the optional pressure switches reducing the need for visual inspection by the operator.



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### Product Features:

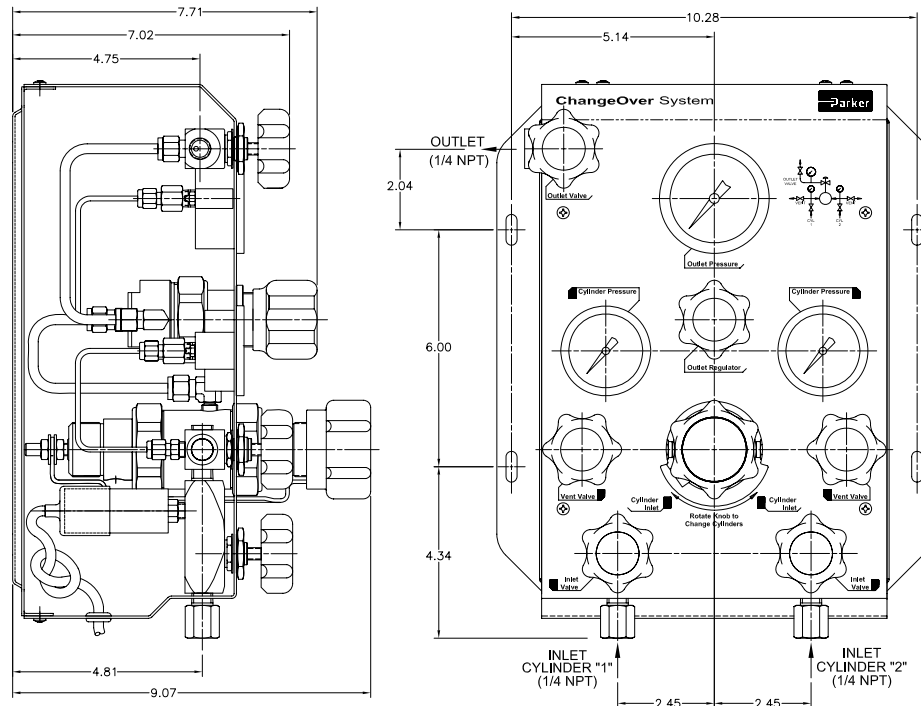
- Fully enclosed to protect internal components
- Removable side panels for field maintenance
- Allows change out of depleted cylinder(s) while maintaining gas flow
- Especially suited for continuous on-stream analyzers
- Alarm sensor port for systems integration allowing user to monitor gas consumption
- Cleaned for Oxygen service
- Regulator design integrates positive upward and downward stops which increases cycle life by preventing over stroking of the diaphragm

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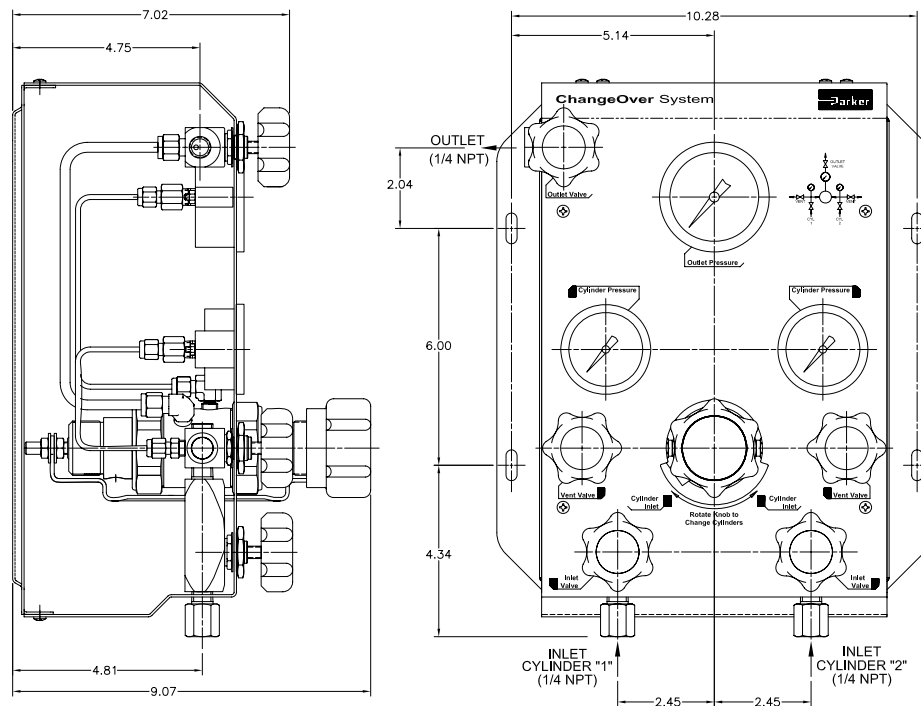
# COSE

## Dimensional Drawing

### With Outlet Regulator

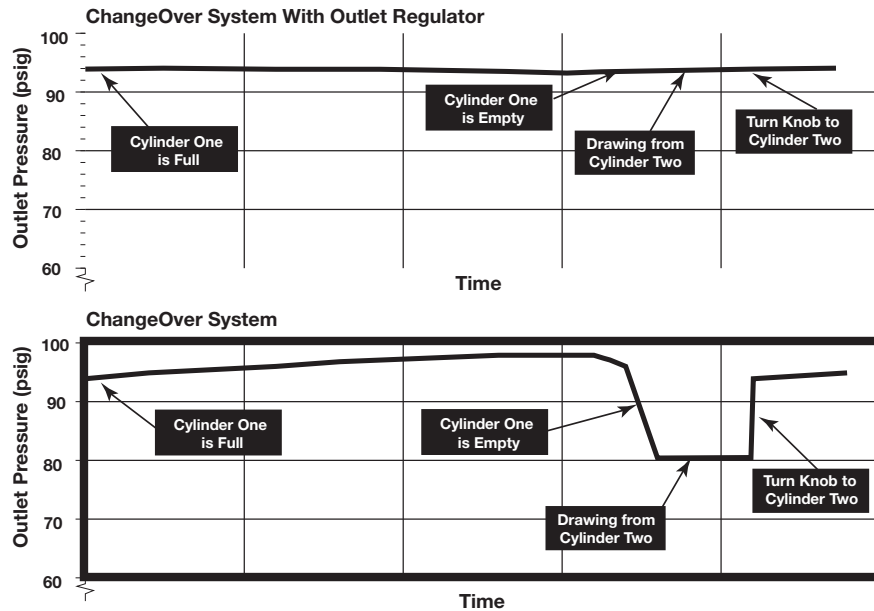


### Without Outlet Regulator



# COSE

## Flow Curves



### ChangeOver System Flow Rates (Based on 400 psig Cylinder Change)

COS Model	Maximum Recommended Flow
COS 200	70 slpm N <sub>2</sub>
COS 250	70 slpm N <sub>2</sub>
COS 150	70 slpm N <sub>2</sub>
COS 100	100 slpm N <sub>2</sub>
COS XXX OR*	70 slpm N <sub>2</sub>

\* ChangeOver System with optional outlet regulators

### Applications

#### Specialty Gases

All Specialty Gases used for Process and Purging Applications

#### Industrial/Analyzer

- Refineries
- Test Cells
- Emission Analysis
- Laboratories
- Laser Gas Systems
- Research and Development
- Gas and Liquid Chromatography
- High Volume Gas Manufacturing Facilities

## Ordering Information

Build a COSE by replacing the numbered symbols with an option from the corresponding tables below.

**Color Explanations:** Black = Standard Lead Time Configurations  
 Blue = Extended Lead Time Configurations  
 Green *Italic* = Express Service Program (ESP)

For an explanation of Ordering options please reference literature 25000275 at [www.parker.com/veriflo](http://www.parker.com/veriflo)

Sample: **COSE** **100** **S** **OR**

Finished Order: **COSE100SOR**

### 1 Pressure Settings

100 = 100 psig  
 150 = 150 psig  
 200 = 200 psig  
 250 = 250 psig

### 2 Materials

S = 316L Stainless Steel  
 B = Brass

### 3 Optional Features

This section can have multiple options

A1 = Pressure Switches *Includes 2 pressure switches*  
 OR = Outlet Regulator  
 Omit = No Outlet Regulator

#### Notes:

*ESP COSE's include outlet regulator as standard*

Configurations without outlet regulator are available at standard lead times.

Inlet valves and gauges are standard on all units.

For audio/visual annunciator details, see COS Annunciator literature sheet.

Annunciator ordering part number: 54017373

# COSE

## Specifications

Materials of Construction	
<b>Wetted</b>	
Body	316 Stainless Steel, Nickel Plated Brass
Diaphragm	Hastelloy C-22®
Poppet	Hastelloy C-22®, Phosphor Bronze
Poppet Spring	Inconel®
Seat	PCTFE
Retainer	Inconel®
Carrier	316L Stainless Steel
Washer Back-up	316L Stainless Steel, Phosphor Bronze
O-ring Back-up	Fluorocarbon
Tubing	316 Stainless Steel, Brass
Fittings	316 Stainless Steel, Brass
<b>Regulator Non-wetted</b>	
Cap	Nickel Plated Brass
Nut	316 Stainless Steel, Nickel Plated Brass
Knob	ABS Plastic (Black)
<b>Valve Wetted</b>	
Body	316L Stainless Steel, Nickel Plated Brass
Diaphragm	Elgiloy® or equivalent
Seat	PCTFE
<b>Valve Non-wetted</b>	
Nut	316 Stainless Steel
Knob	ABS Plastic (Black)

Functional Performance	
<b>Design</b>	
Burst Pressure	9,000 psig (620 barg)
Proof Pressure	4,500 psig (310 barg)
<b>Flow Capacity</b>	C <sub>v</sub> 0.06
<b>Leak Rate</b>	
Internal	Bubble Tight
External	Bubble Tight
<b>Supply Pressure Effect</b>	0.4 psig/100psig (.03/7 barg) without Outlet Regulator option
<b>Standard Configuration</b>	1/4" NPT Female
<b>Approx. Weight</b>	21 lbs. (9.5 kg)
<b>Operating Conditions</b>	
Maximum Inlet	3,000 psig (207 barg)
Outlet	up to 250 psig (17 barg) max
Temperature	-40°F to 150°F (-40°C to 66°C)

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

Elgiloy® is a registered trademark of Elgiloy Company  
Hastelloy C-22® is a registered trademark of Haynes International, Inc.  
Inconel® is a registered trademark of Special Metals Corporation

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