

COSE Series 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.

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
- Regulator design integrates positive upward and downward stops which increases cycle life by preventing over stroking of the diaphragm

Specifications:

Functional Performance	
Design	
Burst Pressure	9,000 psig (620 barg)
Proof Pressure	4,500 psig (310 barg)
Flow Capacity	C _v 0.06
Supply Pressure Effect	
With Outlet Regulator	.01 psig/100 psig (.0007/7 barg)
Without Outlet Regulator	0.4 psig/100 psig (.03/7 barg)
Leak Rate: Internal	Bubble Tight
Leak Rate: External	Bubble Tight
Inlet/Outlet Connection	1/4" NPT
Approximate Weight	21 lbs. (9.5 kg)

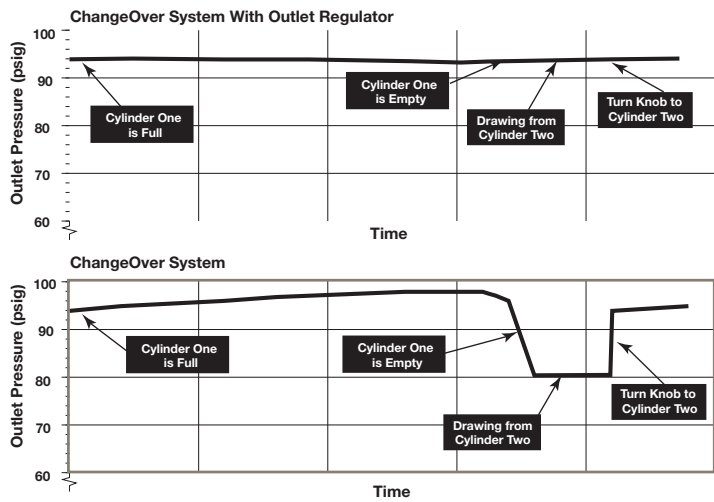
Operating Conditions	
Maximum Inlet Pressure	3,000 psig (207 barg)
Outlet Pressure	Up to 250 psig (17 barg) maximum
Temperature	-40°F to 150°F (-40°C to 66°C)

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

Material of Construction	
Wetted	
Body	316L Stainless Steel (std)
Diaphragm	Hastelloy® C-22
Poppet	Hastelloy® C-22
Poppet Spring	Inconel®
Seat Options	PCTFE
Retainer	Inconel®
Carrier	316L Stainless Steel
Washer Backup	316L Stainless Steel
O-ring Backup	Fluorocarbon
Tubing	316 Stainless Steel
Fittings	316 Stainless Steel
Regulator Non-Wetted	
Cap	Nickel Plated Brass
Nut	316 Stainless Steel
Knob	ABS Plastic (Black)
Valve Wetted	
Body	316L Stainless Steel
Diaphragm	Elgiloy® or equivalent
Seat	PCTFE
Valve Non-Wetted	
Bonnet Nut	316 Stainless Steel
Knob	ABS Plastic (Black)

COSE Series

Flow Curve:



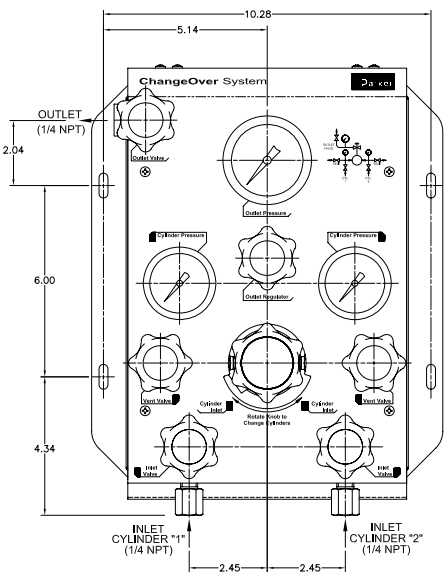
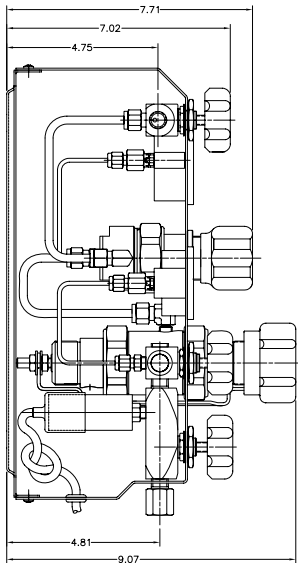
ChangeOver System Flow Rates:

Based on 400 psig Cylinder Change	
COS Model	Maximum Recommended Flow
COS 200	70 slpm N ₂
COS 250	70 slpm N ₂
COS 150	70 slpm N ₂
COS 100	100 slpm N ₂
COS XXX OR*	70 slpm N ₂

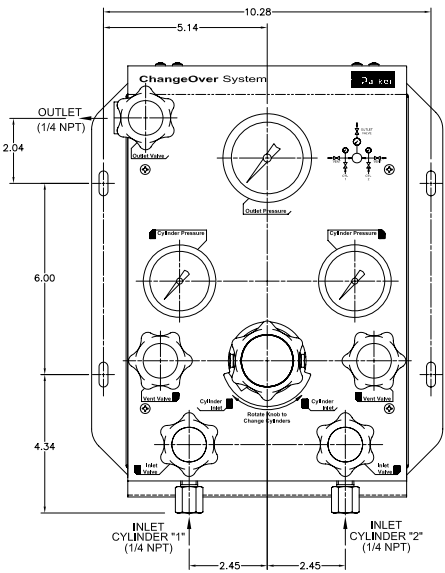
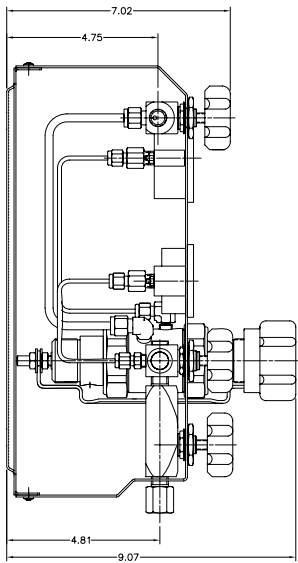
*ChangeOver System with optional outlet regulators

Dimensional Drawing:

With Outlet Regulator



Without Outlet Regulator



COSE Series

Ordering Information:

Building a Part Number: *Example: COSE100SOR*

Example Part Number:	COSE	100	S	OR
Ordering Parameters/Options:	Series	Pressure Settings	Material	Options
Table Reference: (see below)	A	B	C	D

A - Series

COSE	ChangeOver System (COSE)
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B - Pressure Setting

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

C - Material

S	316L Stainless Steel
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D - Optional Features (This section can have multiple options)

A1	Pressure Switches (includes 2 pressure switches)
OR	Outlet Regulator
Omit	No Outlet Regulator

Notes:

Inlet valves and gauges are standard on all units.

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