

ChangeOver System

Continuous Gas Management

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Customer Value Proposition:

The ChangeOver System 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 speciality 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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Specifications

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

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

| Operating Conditions | |
|-------------------------------|---|
| Maximum Inlet Pressure | 3,000 psig (207 barg) |
| Outlet Pressure | up to 250 psig (17 barg) max |
| Temperature: | -40°F to 150°F (-40°C to 66°C) |
| Functional Performance | |
| Design | |
| Burst Pressure | 9,000 psig (620 barg) |
| Proof Pressure | 4,500 psig (310 barg) |
| Flow Capacity | $C_v = 0.06$ <i>SEMI Flow Coefficient Test #F32-0998</i> |
| Supply Pressure Effect | 0.4 psig/100psig (.03/7 barg) <i>without Outlet Regulator option</i> |
| Leakage | |
| External seal | Bubble Tight |
| Internal seat | Bubble Tight |
| Standard Configuration | |
| | 1/4" NPT Female |
| Approx. Weight | 21 lbs. (9.5 kg) |

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

OFFER OF SALE:

The items described in this document are hereby offered for sale by Parker-Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the detailed "Offer of Sale" elsewhere in this document or available at www.parker.com/veriflo



WARNING USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

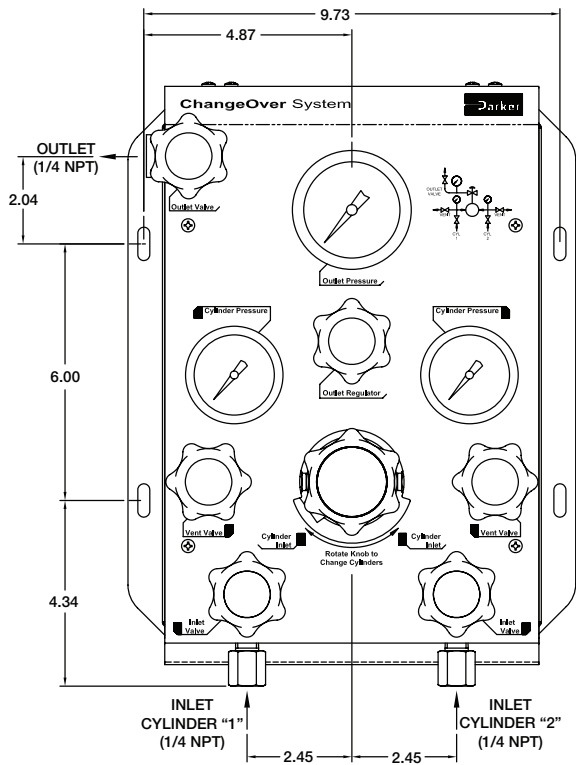
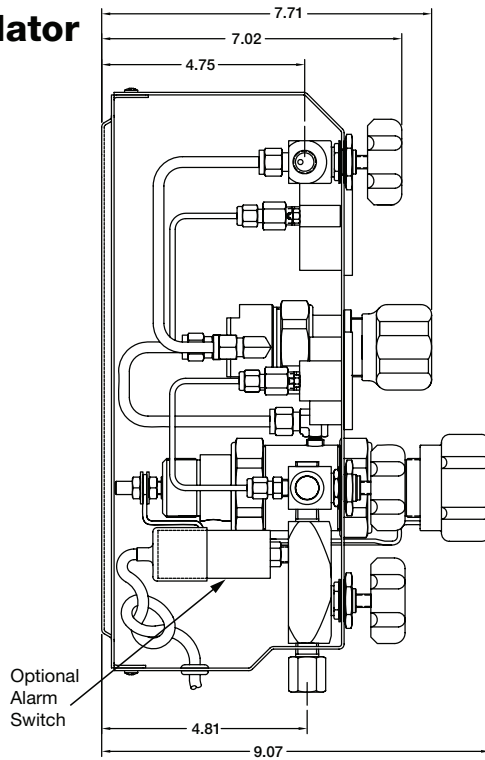
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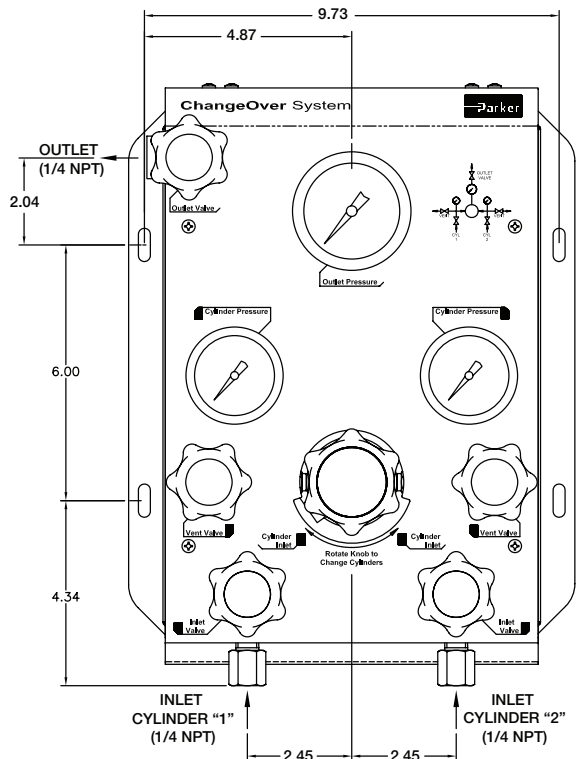
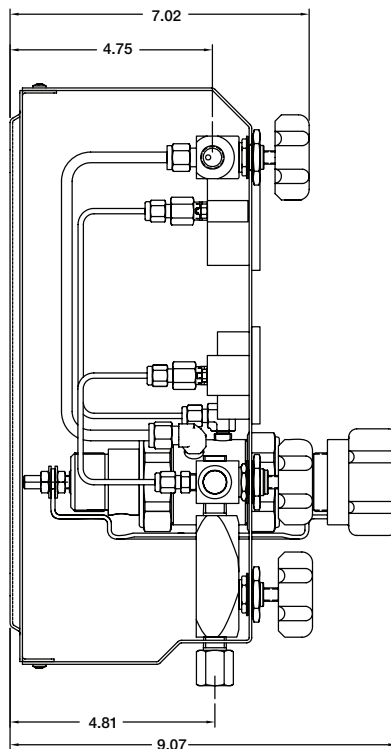
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Dimensional Drawings

With Outlet Regulator

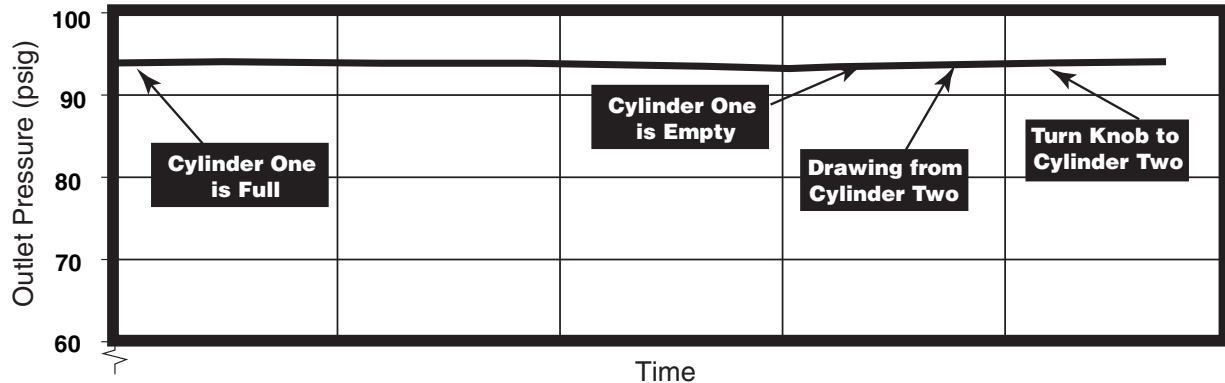


Without Outlet Regulator

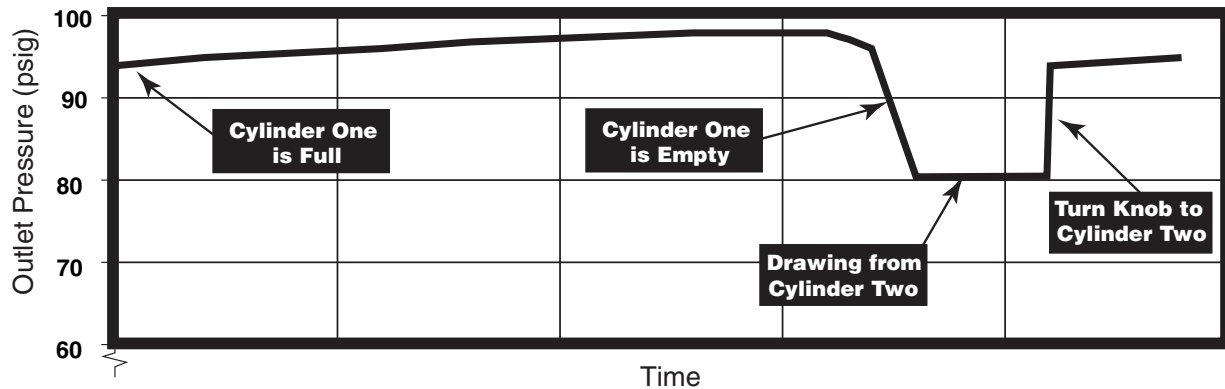


Pressure Drop

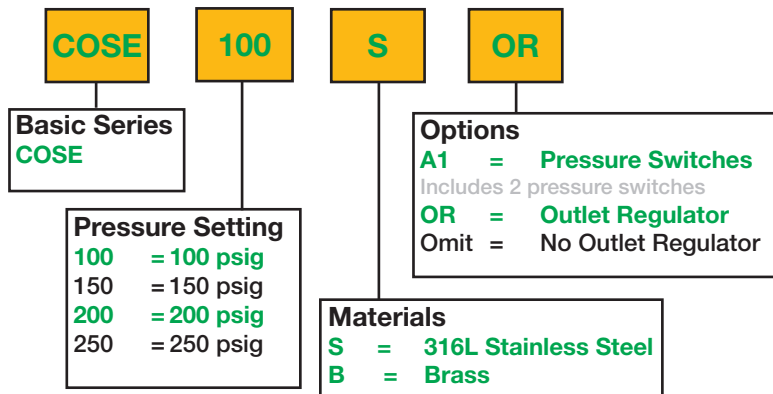
Change Over System With Outlet Regulator



Change Over System



Ordering Information



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.

The Express Service Program is the next generation of customer service to provide customers with an array of standard products in a 5 day delivery window. The ESP program offers a standard lead time of 5 working days from receipt of order to the ship date. Using the Ordering Information shown, you can identify the product configurations offered in the program by the **Green Print**. If the configuration you select is in black print, the product will be ready to ship in the standard lead time. Please contact your local Parker Hannifin Distributor or the factory for any questions regarding the scope of the Express Service Program.

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02/13/08



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