



Design Concepts

Eaton's Carter brand Models 64500 and 64510 are the latest innovation in 3 & 4 inch inline air reference pressure operated control valves. They replace earlier Model 64080, 3 inch and Model 64124, 4 inch inline pressure control valves.

These valves utilize a direct operating design concept with a control module added to the basic valve. This control module is mounted to the main valve body with one bolt. The new control module gives the unit finer control and eliminates exterior tubing from the valve.

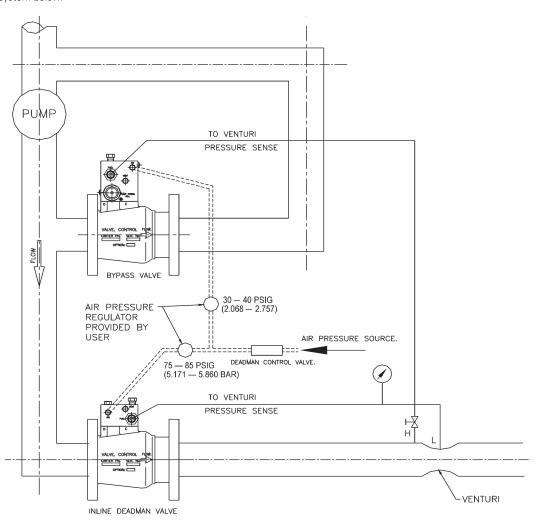
The same control module is used on both the 3 & 4 inch valves. Most of the seals in the main body of the 3 & 4 inch valves are the same, thus minimizing the spares required for any type of maintenance. The control module incorporates a unique bleeder that requires no tools to facilitate bleeding, and it has a vent to prevent fuel from entering the air system, a problem found in several competitors' valves.

Features

- Standard 150 lb ANSI inlet and outlet flanges
- · Victaulic adapters available
- Bleeder on module block facilitates simple bleeding of air from the valve no venting is required once proper bleeding is accomplished
- No expensive servos to adjust
- Spare parts required for maintenance kept to a minimum due to lack of complicated servos. Many parts are common to bypass valves of same size
- Many spares common to Carter brand couplers

Air Reference Controlled Pressure Control Systems

A typical air reference pressure controlled refueler pressure control system below.



Note: The inline and bypass valves shall be installed in such a way that the pressure sense ports shall be located in the top position of both valves to achieve satisfactory bleeding of trapped air

Ordering Data

Both Models 64500 and 64510 have two available options to be added to the basic part number when desired.

| Option | Description |
|--------|-------------|
| Option | Description |

D Victaulic adapter on inlet

E Victaulic adapters on inlet and outlet

Note: It is not recommended to use option E on a valve without additional support to keep it from turning in the piping

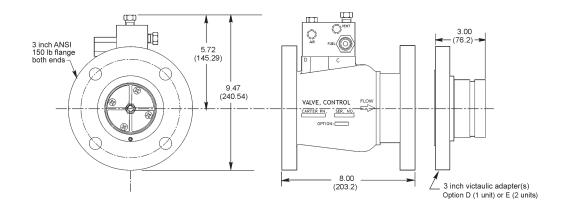
Operating Characteristics

| | 64500 — 3 inch | 64510 — 4 inch |
|-----------------------|---|--|
| Working Pressure | Up to 200 psi (13.793 bar) | Up to 200 psi (13.793 bar) |
| Rated Flow | Up to 800 gpm (3028 l/min) | Up to 1200 gpm (4542 l/min) |
| Pressure Drop | 4.9 psi (.338 bar) @ 600 gpm (2271 l/min) | 4.3 psi (.296 bar) @ 1000 gpm (3785 l/min) |
| Pressure Control | 25 to 75 psi (1.724 to 5.171 bar) nominal | 25 to 75 psi (1.724 to 5.171 bar) nominal |
| Overshoot | < 5% of rated flow | < 5% of rated flow |
| Opening Time | 5 to 10 seconds | 5 to 10 seconds |
| Closing time | 2 to 5 seconds — (see overshoot) | 2 to 5 seconds — (see overshoot) |
| Repeatability | ±3 psi (.207 bar) | ±3 psi (.207 bar) |
| Surge Control | >120 psi (8.273 bar) | >120 psi (8.273 bar) |
| Operating Temperature | -40° F to +125° F (-40° C to +52° C) | -40° F to +125° F (-40° C to +52° C) |

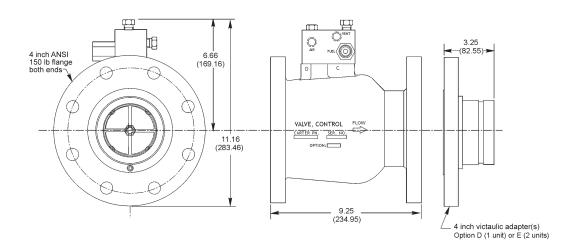
Envelope Dimensions

Dimensions shown in inches (millimeters)

Model 64500



Model 64510



Eaton Aerospace Group Conveyance Systems Division 9650 Jeronimo Road Irvine, California 92618 Phone: (949) 452 9500 Fax: (949) 452 9992

Eaton Aerospace Group Conveyance Systems Division 90 Clary Connector Eastanollee, Georgia 30538 Phone: (706) 779 3351 Fax: (706) 779 2638

Eaton Aerospace Group Conveyance Systems Division 15 Pioneer Ave. Warwick, Rhode Island 02888 Phone: (401) 781 4700 Fax: (401) 785 4614

Eaton S.A Aerospace Group Conveyance Systems Division 62 Chemin De Pau 64121 Serres-Castet France Phone: (33) 559 333 864 Fax: (33) 559 333 865 Eaton
Aerospace Group
Conveyance Systems Division
300 South East Avenue
Jackson, Michigan 49203-1972
Phone: (517) 787 8121
Fax: (517) 787 5758

Eaton S. A.
Aerospace Group
Conveyance Systems Division
2 Rue Lavoisier BP 54 78310
Coignieres, France
Phone: (33) 130 69 30 00
Fax: (33) 130 69 30 56

Eaton GmbH
Aerospace Group
Conveyance Systems Division
Rudolf-Diesel-Strasse 8
82205 Gilching
Germany
Phone: 49 (0) 8105 7530
Fax: 49 (0) 8105 7555

Eaton Aerospace Group Conveyance Systems Division 11642 Old Baltimore Pike Beltsville, Maryland 20705 Phone: (301) 937 4010 Fax: (301) 937 0134

Eaton Limited
Aerospace Group
Conveyance Systems Division
Broad Ground Road
Lakeside, Redditch
Worcestershire
B98 8YS
United Kingdom
Phone: (44) 1527 517555
Fax: (44) 1527 517556

Vickers Systems Pte Ltd Aerospace Group Conveyance Systems Division Lot 512, Jalan Delima, Batamindo Industrial Park Batam 294533, Indonesia Phone: (62) 770 611823 Fax: (62) 770 611821

