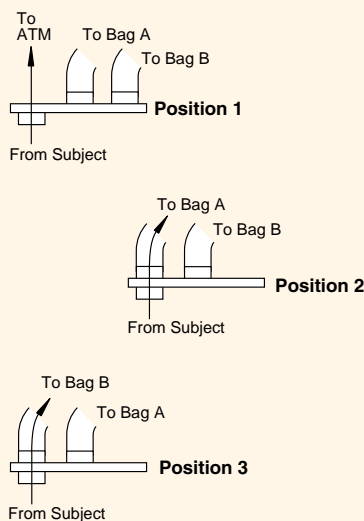


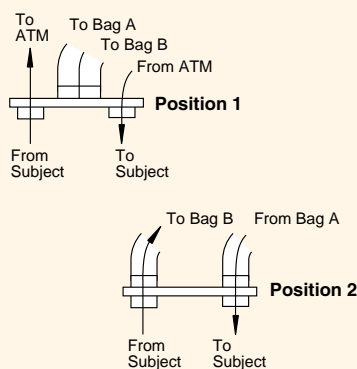
Harvard Douglas Bag Sets and Tubing Valves

Tubing Valves

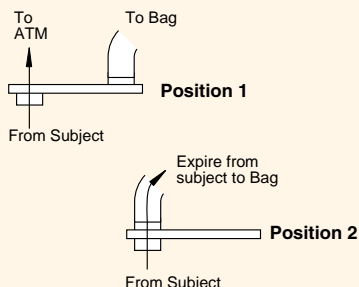
Change-Over Tubing Valve



Double Channel Tubing Valve



Single Channel Tubing Valve



- Three types are available: Single Channel, Change-Over and Double Channel

Tubing Valves

These Tubing Valves have two 115 mm (4-1/2 in) diameter, aluminum alloy sections held against each other by a bolt with a heavy spring. A thick polythene washer between the valve sections makes their junction gas-tight and provides an appropriate surface on which they can rotate. The desired connections can be made by rotating the valve sections against each other to the stops provided.

All three valve types allow the subject to be connected to the atmosphere while they regulate their breathing. By rotating the aluminum alloy sections, the single channel valve provides a direct connection to a single Douglas bag. The change-over valve allows a direct connection to either Douglas bag A or Douglas bag B. The double channel Valve provides a closed circuit so that the subject's inspiratory tube is connected to the gas supply bag A and the expiratory tube is connected to the gas collection bag B.

Catalog No.	Product
CGS 8447.68	Single Channel Tubing Valve
CGS 8448.68	Change-Over Tubing Valve
CGS 8449.68	Double Channel Tubing Valve

Closed Circuit Double Bag Set

This closed circuit double Douglas bag set can be used in an extensive range of tests including:

- Metabolic rate before, during and after exercise
- Effects of humidity and temperature on ventilation
- Calculation of oxygen consumption
- Effects of breathing high and low CO₂ concentrations on ventilation, respiratory rate and O₂ consumption

The double channel tubing valve has two settings. The first setting allows exhaust air from the test subject to be routed to the atmosphere. The second setting connects the subject's inspiratory tube to the gas supply bag and the expiratory tube to the gas collection bag. Residual volume, functional residual capacity and total lung capacity can also be tested by adding an additional tubing valve at the mouth of one of the bags.

Catalog No.	Product
CGS 8444.68	Closed Circuit Double Bag Set

Direct Fill Double Bag Set

This double bag set is intended for the same kinds of tests as the single bag set with the following additional advantages:

- Greater capacity
- Allows isolation of two discrete samples during the same test

The change-over tubing valve has three different settings allowing exhausted air from test subject to be routed to the atmosphere or to either of the bags. The single channel tubing valve at the mouth of each bag offers a positive seal after the bag has been filled.

Catalog No.	Product
CGS 8445.68	Direct Fill Double Bag Set

Direct Fill Single Bag Set

This basic set is for tests such as pulmonary ventilation, metabolic rate estimation and metabolic rate during work. The set is supplied with a 100 liter capacity Douglas bag.

Catalog No.	Product
CGS 8446.68	Direct Fill Single Bag Set