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Oxford Valves OV-C10-200 Series

C10 Valves for Calibration Gas and Specialty Gas Cylinders

Product Overview

The Oxford Valves **OV-C10-200 Series** is a range of compact self-closing C10 cylinder valves designed for portable calibration gas cylinders, specialty gas cylinders, refillable gas packages, and non-refillable gas cylinders.

The range includes stainless steel, aluminium, brass, and burst disc configurations to support different gas compatibility, cylinder connection, material, pressure, and weight requirements.

Oxford Valves C10 valves are suitable for use in calibration gas, gas detection, environmental monitoring, laboratory gas, marine safety, industrial safety, and specialty gas applications.

What Is a C10 Valve?

A C10 valve is a compact self-closing cylinder valve commonly used on small portable calibration gas cylinders. It allows controlled gas release when connected to a compatible regulator, adaptor, or gas delivery device, and closes when disconnected.

C10 valves are widely used in calibration gas applications because they support small cylinder formats, controlled dispensing, and safe gas handling when correctly matched to the cylinder, gas mixture, pressure, regulator, and application.

Series Structure

Series Name: OV-C10-200 Series

Product Type: Self-closing C10 cylinder valves

Model Range: OV-C10-201 to OV-C10-211

Applications: Calibration gas, specialty gas, gas detection, gas analysis, laboratory gas, and portable gas cylinder packages

Browse by Material

Stainless Steel C10 Valves

Stainless steel C10 valves are commonly selected for applications where stronger material compatibility is required, including many reactive and non-reactive gas mixtures. Final compatibility should always be confirmed against the gas mixture and service conditions.

Aluminium C10 Valves

Aluminium C10 valves provide a lightweight option for suitable portable cylinder packages. They are commonly used where reduced valve weight is useful and where the gas mixture is compatible with the valve material and sealing components.

Brass C10 Valves

Brass C10 valves are suitable for compatible non-reactive gas applications. Brass should not be assumed suitable for all gases without a technical compatibility review.

Burst Disc C10 Valves

Burst disc C10 valves include a pressure relief safety mechanism for selected cylinder applications. Burst disc selection must be confirmed based on cylinder type, working pressure, gas mixture, filling process, and applicable safety requirements.

Applications

Oxford Valves OV-C10-200 Series valves are used in:

- Portable calibration gas cylinders
- Refillable calibration gas cylinders
- Non-refillable calibration gas cylinders
- Gas detector bump testing cylinders
- Specialty gas sample cylinders
- Laboratory gas packages

- Environmental monitoring gas cylinders
 - Process gas analysis systems
 - Marine gas detection calibration
 - Industrial safety gas detection systems
 - Portable test gas packages
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Suitable Markets

The OV-C10-200 Series is suitable for:

- Calibration gas suppliers
 - Specialty gas companies
 - Industrial gas companies
 - Gas detection equipment suppliers
 - Gas detector calibration service providers
 - Environmental monitoring companies
 - Laboratories and analytical instrument users
 - Marine safety suppliers
 - Petrochemical and refinery safety teams
 - Gas cylinder package suppliers
 - International distributors and technical buyers
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Key Features

- Compact self-closing C10 cylinder valve design
 - Suitable for portable calibration gas cylinders
 - Refillable and non-refillable options
 - Stainless steel, aluminium, and brass body options
 - Viton seats and seals across the listed range
 - Multiple inlet connection options
 - 5/8" x 18UN outlet connection across the model range
 - Burst disc options available on selected models
 - Suitable options for reactive and non-reactive gas applications, subject to compatibility review
 - Manufactured under ISO 9001 quality processes
 - Oxford Valves branded product range
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Model Comparison Table

Oxford Valves Model	Type	Body Material	Inlet Connection	Outlet Connection	Working Pressure	Weight	Typical Use
OV-C10-201	Refillable C10 valve	Stainless steel	1" x 14UN	5/8" x 18UN	0 to 1305 psig / 90 bar	0.090 kg	Refillable calibration gas cylinders
OV-C10-202	Refillable C10 valve	Aluminium anodised	1" x 14UN	5/8" x 18UN	0 to 1305 psig / 90 bar	0.035 kg	Lightweight refillable cylinders
OV-C10-203	Refillable C10 valve	Brass	1" x 14UN	5/8" x 18UN	0 to 1305 psig / 90 bar	0.100 kg	Non-reactive gas applications
OV-C10-204	Refillable C10 valve	Stainless steel	3/4" x 16UN	5/8" x 18UN	0 to 1305 psig / 90 bar	0.053 kg	Refillable cylinders with 3/4" inlet
OV-C10-205	Refillable C10 valve	Stainless steel	5/8" x 18UN	5/8" x 18UN	0 to 1305 psig / 90 bar	0.053 kg	Compact stainless steel configuration
OV-C10-206	Refillable C10 valve	Stainless steel	M18 x 1.5	5/8" x 18UN	0 to 1305 psig / 90 bar	0.061 kg	Cylinders requiring M18 inlet
OV-C10-207	Non-refillable C10 valve	Stainless steel	1" x 14UN	5/8" x 18UN	0 to 1305 psig / 90 bar	0.091 kg	Non-refillable cylinders

Oxford Valves Model	Type	Body Material	Inlet Connection	Outlet Connection	Working Pressure	Weight	Typical Use
OV-C10-208	Non-refillable C10 valve	Aluminum anodized	1" x 14UN	5/8" x 18UN	0 to 1300 psig / 90 bar	0.037 kg	Lightweight non-refillable cylinders
OV-C10-209	Refillable C10 valve	Stainless steel	1/4" NPTM	5/8" x 18UN	0 to 1305 psig / 90 bar	0.057 kg	Cylinders requiring 1/4" NPTM inlet
OV-C10-210	Refillable C10 valve with burst disc	Stainless steel	1" x 14UN	5/8" x 18UN	See burst disc table	0.135 kg	Burst disc safety configuration
OV-C10-211	Refillable C10 valve with burst disc	Aluminum anodized	1" x 14UN	5/8" x 18UN	0 to 1305 psig / 90 bar	0.057 kg	Lightweight burst disc configuration

Stainless Steel C10 Valves

OV-C10-201

Refillable Stainless Steel C10 Valve

The OV-C10-201 is a stainless steel self-closing C10 valve for portable refillable calibration gas cylinders. It is designed for applications requiring stainless steel construction, Viton sealing, and a 1" x 14UN inlet connection.

Specification	Detail
Product type	Refillable C10 valve
Body material	Stainless steel

Specification	Detail
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	1" x 14UN
Outlet connection	5/8" x 18UN
Weight	0.090 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

Typical applications:

Portable calibration gas cylinders, refillable test gas cylinders, gas detector calibration, and specialty gas packages.

OV-C10-204

Refillable Stainless Steel C10 Valve with 3/4" x 16UN Inlet

The OV-C10-204 is a stainless steel refillable C10 valve with a 3/4" x 16UN inlet connection. It is suitable for portable calibration gas cylinder packages requiring this inlet thread configuration.

Specification	Detail
Product type	Refillable C10 valve
Body material	Stainless steel
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	3/4" x 16UN
Outlet connection	5/8" x 18UN
Weight	0.053 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

Typical applications:

Refillable calibration gas cylinders, compact gas packages, and specialty gas cylinder assemblies.

OV-C10-205

Refillable Stainless Steel C10 Valve with 5/8" x 18UN Inlet

The OV-C10-205 is a stainless steel C10 valve with 5/8" x 18UN inlet and 5/8" x 18UN outlet connections. It is used where both inlet and outlet configurations require compact 5/8" x 18UN threading.

Specification	Detail
Product type	Refillable C10 valve
Body material	Stainless steel
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	5/8" x 18UN
Outlet connection	5/8" x 18UN
Weight	0.053 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

Typical applications:

Compact refillable calibration gas cylinders and specialty gas cylinder packages.

OV-C10-206

Refillable Stainless Steel C10 Valve with M18 x 1.5 Inlet

The OV-C10-206 is a stainless steel refillable C10 valve with an M18 x 1.5 inlet connection and a 5/8" x 18UN outlet connection. It is designed for cylinder packages requiring an M18 inlet thread.

Specification	Detail
Product type	Refillable C10 valve
Body material	Stainless steel
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton

Specification	Detail
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	M18 x 1.5
Outlet connection	5/8" x 18UN
Weight	0.061 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

Typical applications:

Refillable calibration gas cylinders, specialty gas cylinders, and gas packages requiring M18 x 1.5 inlet connection.

OV-C10-207

Non-Refillable Stainless Steel C10 Valve

The OV-C10-207 is a stainless steel non-refillable C10 valve for portable disposable calibration gas cylinder applications. It is designed for non-refillable gas packages where stainless steel construction is required.

Specification	Detail
Product type	Non-refillable C10 valve
Body material	Stainless steel
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	1" x 14UN
Outlet connection	5/8" x 18UN
Weight	0.091 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

Typical applications:

Disposable calibration gas cylinders, non-refillable gas packages, gas detector calibration, and industrial safety test gases.

OV-C10-209

Refillable Stainless Steel C10 Valve with 1/4" NPTM Inlet

The OV-C10-209 is a stainless steel refillable C10 valve with a 1/4" NPTM inlet connection and a 5/8" x 18UN outlet connection. It is suitable for refillable gas cylinders requiring an NPT inlet configuration.

Specification	Detail
Product type	Refillable C10 valve
Body material	Stainless steel
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	1/4" NPTM
Outlet connection	5/8" x 18UN
Weight	0.057 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

Typical applications:

Refillable calibration gas cylinders and specialty gas packages requiring 1/4" NPTM inlet connection.

OV-C10-210

Stainless Steel C10 Valve with Burst Disc

The OV-C10-210 is a stainless steel refillable C10 valve with an integrated burst disc safety mechanism. It is suitable for selected portable refillable calibration gas cylinders where a burst disc configuration is required.

Specification	Detail
Product type	Refillable C10 valve with burst disc
Body material	Stainless steel
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	See burst disc table

Specification	Detail
Inlet connection	1" x 14UN
Outlet connection	5/8" x 18UN
Weight	0.135 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

OV-C10-210 Burst Disc Data

Working Pressure	Burst Disc Pressure
0–600 psi	0–900 psi @ 63°C
0–1200 psi	0–1750 psi @ 63°C

Typical applications:

Refillable calibration gas cylinders requiring a burst disc safety mechanism.

Aluminium C10 Valves

OV-C10-202

Refillable Aluminium C10 Valve

The OV-C10-202 is a lightweight refillable C10 valve with an anodised aluminium body, stainless steel valve pin and valve seat, and Viton seats and seals. It is designed for compatible portable calibration gas cylinder packages where reduced valve weight is useful.

Specification	Detail
Product type	Refillable C10 valve
Body material	Aluminium anodised
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	1" x 14UN
Outlet connection	5/8" x 18UN
Weight	0.035 kg
Gas suitability	Reactive and non-reactive gases, subject to

Specification	Detail
	compatibility review

Typical applications:

Lightweight refillable calibration gas cylinders, portable gas packages, and suitable specialty gas applications.

OV-C10-208

Non-Refillable Aluminium C10 Valve

The OV-C10-208 is a lightweight non-refillable C10 valve with an anodised aluminium body, stainless steel internal valve components, and Viton seats and seals. It is used for compatible disposable calibration gas cylinder packages.

Specification	Detail
Product type	Non-refillable C10 valve
Body material	Aluminium anodised
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1300 psig / 90 bar
Inlet connection	1" x 14UN
Outlet connection	5/8" x 18UN
Weight	0.037 kg
Gas suitability	Non-reactive gases, subject to compatibility review

Typical applications:

Lightweight disposable calibration gas cylinders and non-refillable portable gas packages.

OV-C10-211

Aluminium C10 Valve with Burst Disc

The OV-C10-211 is a lightweight aluminium refillable C10 valve with a burst disc safety mechanism. It uses an anodised aluminium body, stainless steel valve pin and valve seat, and Viton seats and seals.

Specification	Detail
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Specification	Detail
Product type	Refillable C10 valve with burst disc
Body material	Aluminium anodised
Valve pin	Stainless steel
Valve seat	Stainless steel
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	1" x 14UN
Outlet connection	5/8" x 18UN
Weight	0.057 kg
Gas suitability	Reactive and non-reactive gases, subject to compatibility review

Typical applications:

Lightweight refillable calibration gas cylinders requiring a burst disc configuration.

Brass C10 Valves

OV-C10-203

Refillable Brass C10 Valve

The OV-C10-203 is a brass refillable C10 valve for compatible non-reactive gas applications. It includes brass body, brass valve pin, brass valve seat, and Viton seats and seals.

Specification	Detail
Product type	Refillable C10 valve
Body material	Brass
Valve pin	Brass
Valve seat	Brass
Seats and seals	Viton
Working pressure	0 to 1305 psig / 90 bar
Inlet connection	1" x 14UN
Outlet connection	5/8" x 18UN
Weight	0.100 kg

Specification	Detail
Gas suitability	Non-reactive gases

Typical applications:

Compatible non-reactive calibration gas mixtures, refillable calibration gas cylinders, and industrial gas applications where brass is suitable.

Refillable and Non-Refillable Options

Refillable C10 Valves

Refillable C10 valves are used on cylinders designed to be filled, used, returned, inspected, and refilled through a controlled filling process.

Relevant models:

- OV-C10-201
- OV-C10-202
- OV-C10-203
- OV-C10-204
- OV-C10-205
- OV-C10-206
- OV-C10-209
- OV-C10-210
- OV-C10-211

Non-Refillable C10 Valves

Non-refillable C10 valves are used on disposable or single-use calibration gas cylinder packages that are not intended to be refilled after use.

Relevant models:

- OV-C10-207
 - OV-C10-208
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Material Selection Guide

Stainless Steel

Stainless steel C10 valves are typically selected for applications requiring strong material compatibility, especially where reactive or mixed gas applications need to be reviewed carefully.

Aluminium

Aluminium C10 valves provide a lightweight option for suitable calibration gas cylinder packages. Final suitability should be confirmed against gas mixture, cylinder material, pressure, and service conditions.

Brass

Brass C10 valves are typically used with compatible non-reactive gases. Brass should not be assumed suitable for all gases without a compatibility review.

Gas Compatibility Notes

Gas compatibility depends on the gas mixture, concentration, moisture content, cylinder material, valve body material, seat and seal material, working pressure, temperature, and service conditions.

As a general guide:

- Stainless steel options are commonly selected for reactive and non-reactive gas applications.
- Aluminium options are selected where compatible with the gas and cylinder package.
- Brass options are generally used for compatible non-reactive gases.
- Viton seats and seals are used across the listed OV-C10-200 Series range.

Final model selection should be confirmed against the specific gas mixture and application.

Safety Notes

C10 valves are pressure-containing components and must be selected, installed, filled, transported, and used by trained personnel.

The correct valve should be selected based on:

- Cylinder type
- Refillable or non-refillable use
- Working pressure
- Gas compatibility
- Inlet connection
- Outlet connection
- Regulator compatibility
- Seal material
- Applicable market and transport requirements

Do not use any C10 valve outside its specified pressure rating, material compatibility, or intended application.

Quality Statement

Oxford Valves supplies the OV-C10-200 Series as part of its branded range of precision gas valves and regulators.

Products are manufactured under ISO 9001 quality processes and are intended for calibration gas, specialty gas, industrial gas, gas detection, and portable cylinder applications.

Technical Notes

- Product dimensions should be confirmed against the latest Oxford Valves technical drawing.
- Gas compatibility must be confirmed before final product selection.
- Pressure ratings must not be exceeded.
- Burst disc configuration must be selected according to working pressure, temperature, cylinder type, and safety requirements.
- Final approval or compliance wording should only be used where confirmed by Oxford Valves.



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