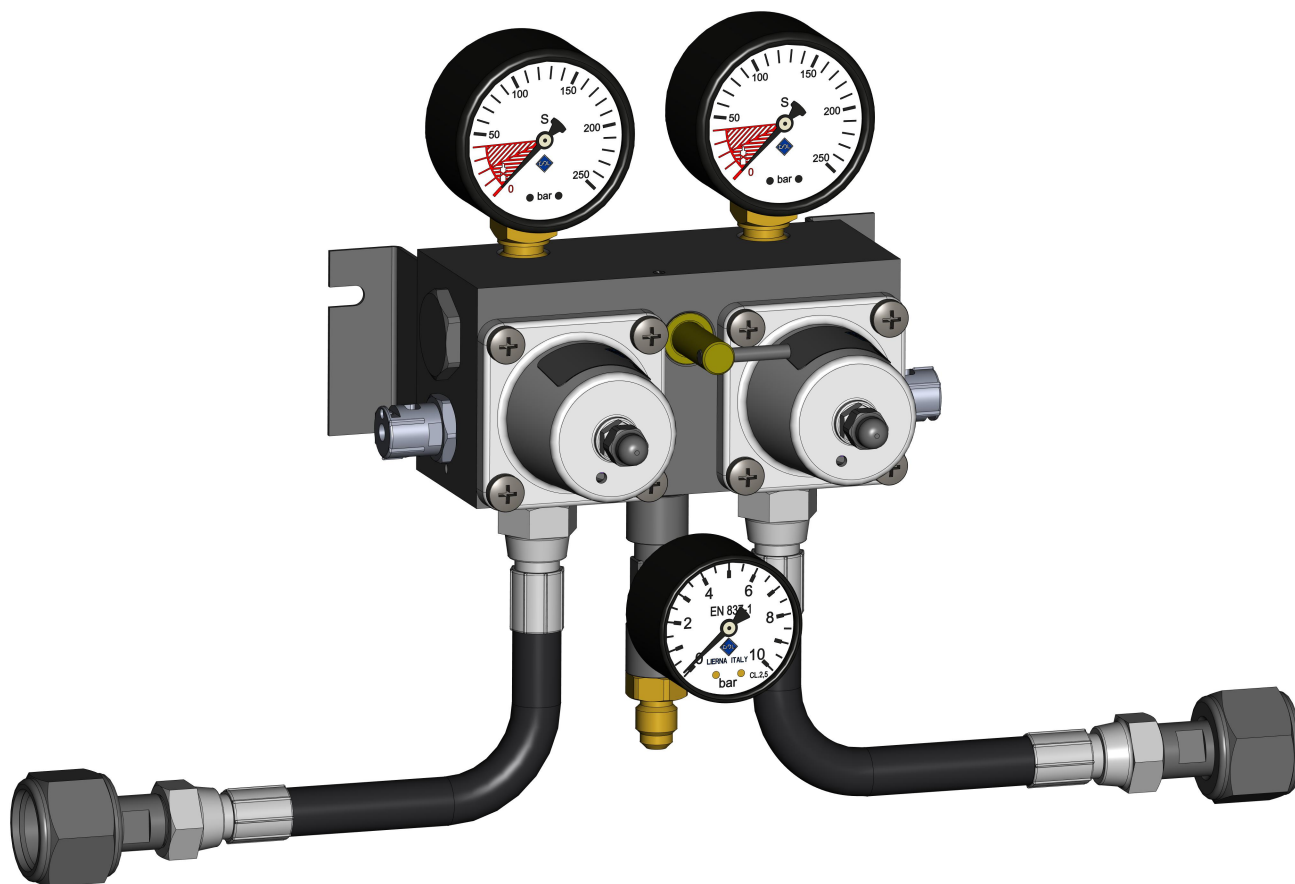


Automatic bottle changer SA-3334 Datasheet



General Informations



Technical Description

The SA-3334 regulator family enables the continuous use of two or more bottles, ensuring automatic changeover to the reserve cylinder when the primary cylinder is depleted.

The product integrates two SC primary regulators into a single aluminum body, designed for connection to bottles through high-pressure hoses and for wall mounting by means of a rear steel bracket.

Features

The maximum deliverable volumetric flow rate is 40 NL/min. Correct operation is guaranteed only when both regulators are factory preset to the same pressure value, specified at the time of ordering. Versions are available with standard pressure gauges, pressure gauges with output signal, and pressure switches.

Materials

The high-pressure valve and mounting bracket are made of steel. The body is made of aluminum, while the cylinder fittings are made of nickel-plated CW614N brass. All internal high-pressure seals are made of PTFE. Cylinder connection gaskets are available in different materials.

Applications

Domestic

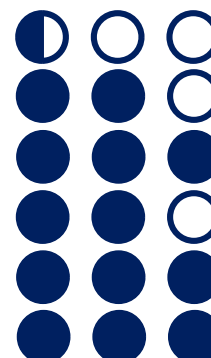
Ho.Re.Ca.

Professional

Soft drink

Beer

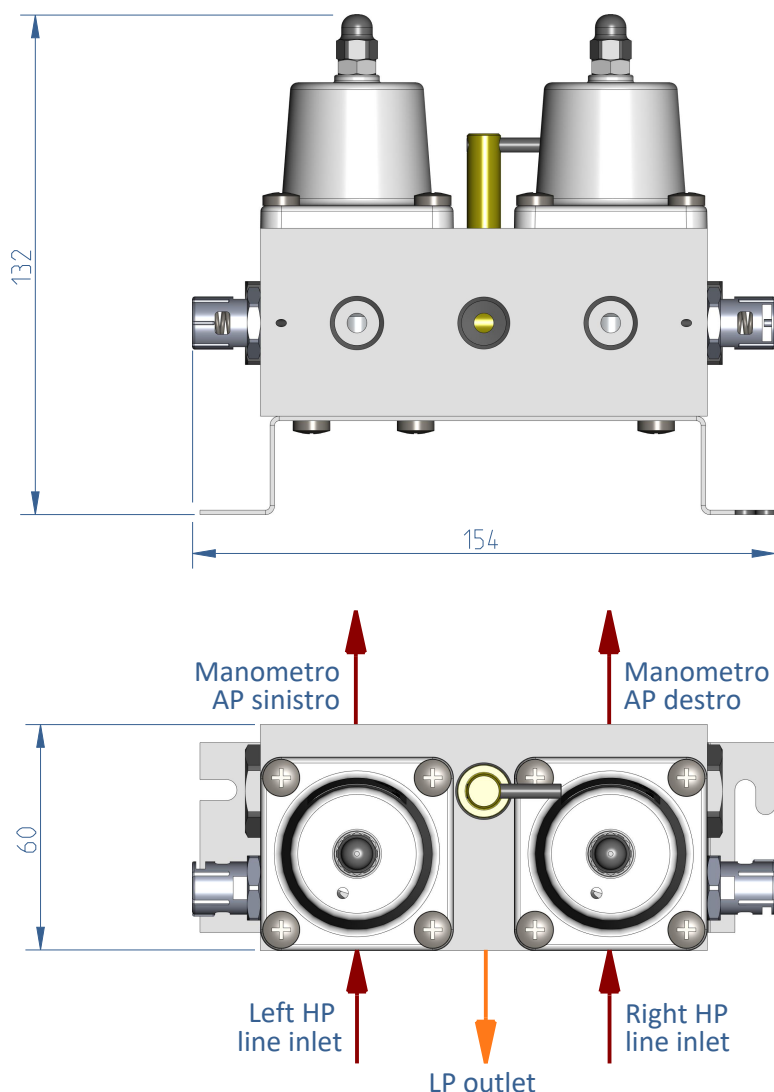
Sparkling water



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Main body features



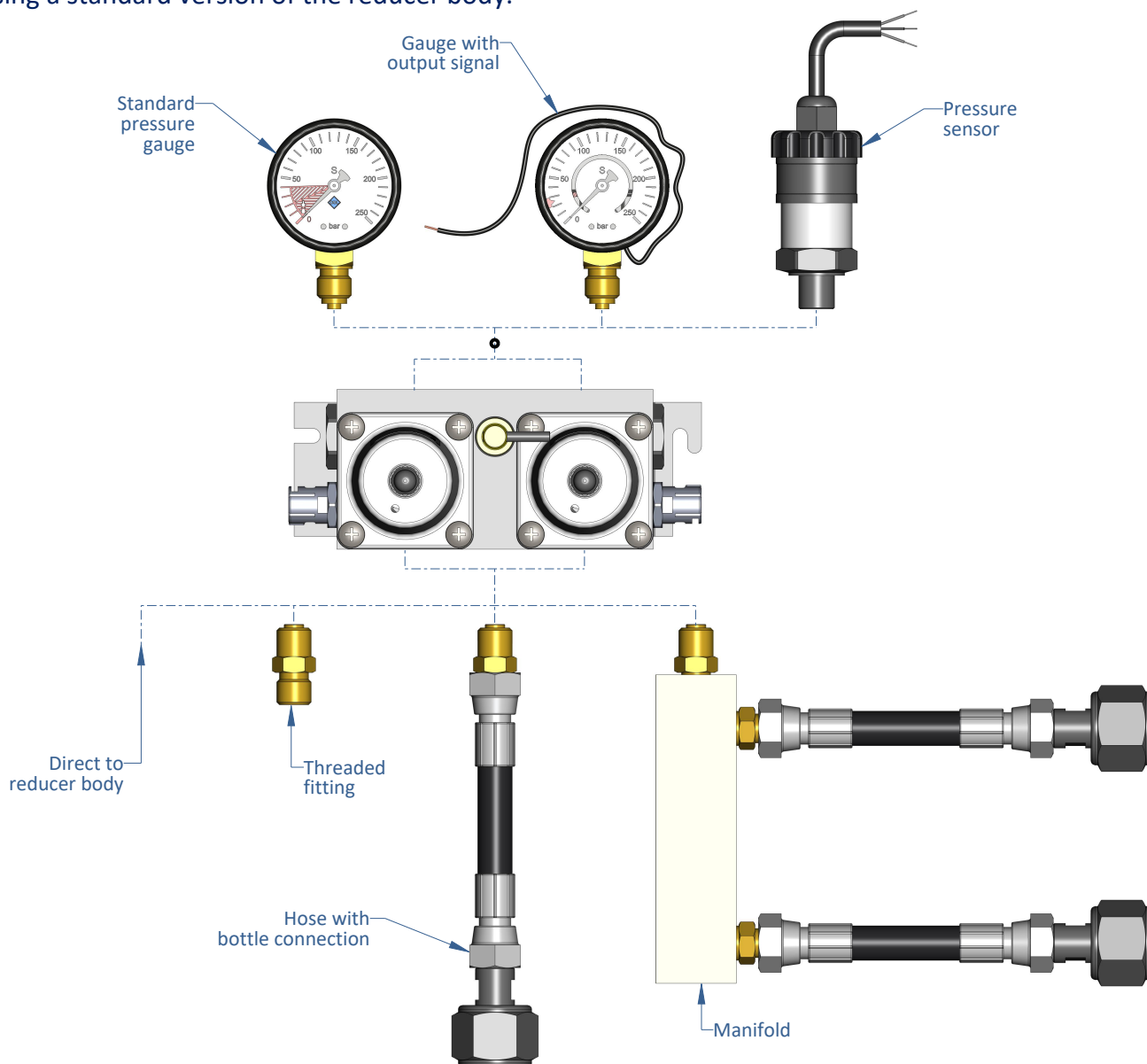
Heigth "H"- Width "W"- Depth "D" mm	132x154x60
Body threads -	All connections have a G1/4" thread
Diaphragm diameter mm	47
Pressure relief valve oreifice diameter mm	6
Working fluids -	CO ₂
High pressure line burst pressure bar	1300
Low pressure chamber burst pressure bar	>60
Pressure relief valve -	2 (one for each inlet line)
Relief valve initial opening pressure bar	Fino a 8
Maximum overpressure %	20
Maximum inlet pressure bar	100
Maximum outlet pressure bar	7
Type of regulation -	Fixed
Maximum ambient operation temperature °C	Fino a 50
Maximum storage temperature °C	Da -5 a 60

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High Pressure line features

The drawing below summarizes the possible configurations that can be adopted on the high pressure line using a standard version of the reducer body.



High pressure gauge features

Diameter 50mm

Pressure gauge types Standard, with output signal o pressure sensor.

Features 0-250bar scale range, empty bottle marker, double scale (bar and MPa).

Configurazione linee di alta pressione

Direct to body Connection to the aluminum body is provided through a G1/4" female thread; however, the cylinders must still be connected using a flexible hose.

Threaded fitting G1/4" male thread with internal cone-to-cone sealing connection; however, the cylinders must still be connected using a flexible hose.

Hose Standard length: 1.2 m. Available in lengths from 1 m to 1.5 m, with a burst pressure of 860 bar.

Manifold Each manifold can accommodate two hose connections. Configurations with connections for more than three cylinders per manifold are available upon request.

Bottle connection features

Cylinder connections from the SC family configured for CO can be used.

ODL reserves the right to modify the characteristics of this sheet without prior notice and recommends contacting the technical office when you intend to use the product very close to the indicated limits. Copyright © of O.D.L. s.r.l.

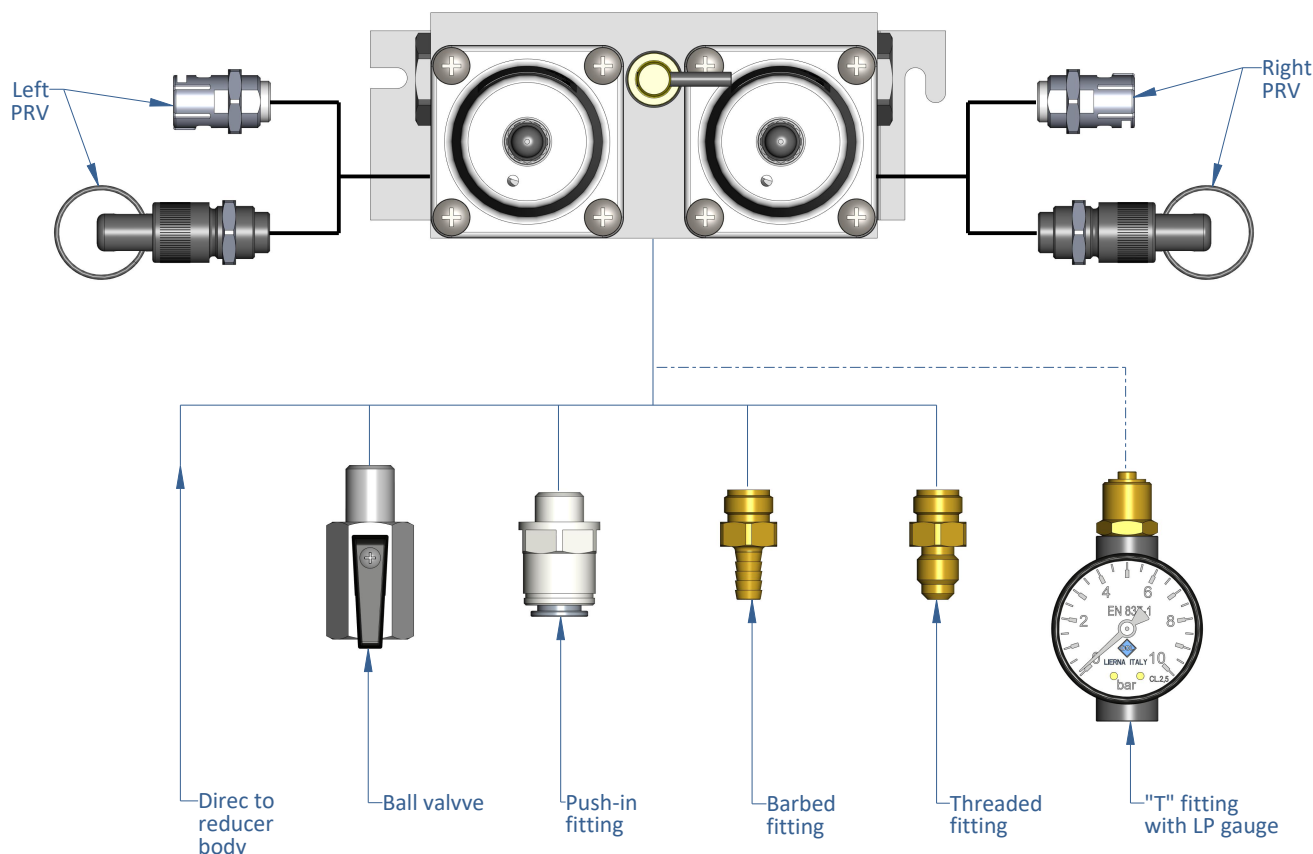
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Low Pressure lines features

The drawing below summarizes the possible configurations that can be adopted on the low pressure line using a standard version of the reducer body.



Pressure Relief Valve (PRV) features

PRV initial relief	Up to 8bar
PRV configurations	Standard or with ring

Low pressure gauge on "T" fitting

Diameter	40mm
Scale range	0-10bar
Outlet connection	G1/4" thread

Outlet fittings

Barbed fitting diameter	Ø4.5, Ø7.2, Ø8.1, Ø9.6, Ø10.5 e Ø11.5mm other on request
Threaded fittings	G1/4", 20UNF-7/16", other on request
Ball valve	Outlet connection G 1/4", can be used in combination with other fittings
Push-in fittings	Available dimensions are Ø4mm, Ø6mm, Ø8mm, Ø3/8" and Ø1/4"
Notes	Normally, only one of the two outlets is used for the outlet fittings. The second outlet is intended for the pressure gauge; if not used, it may be plugged or left open.

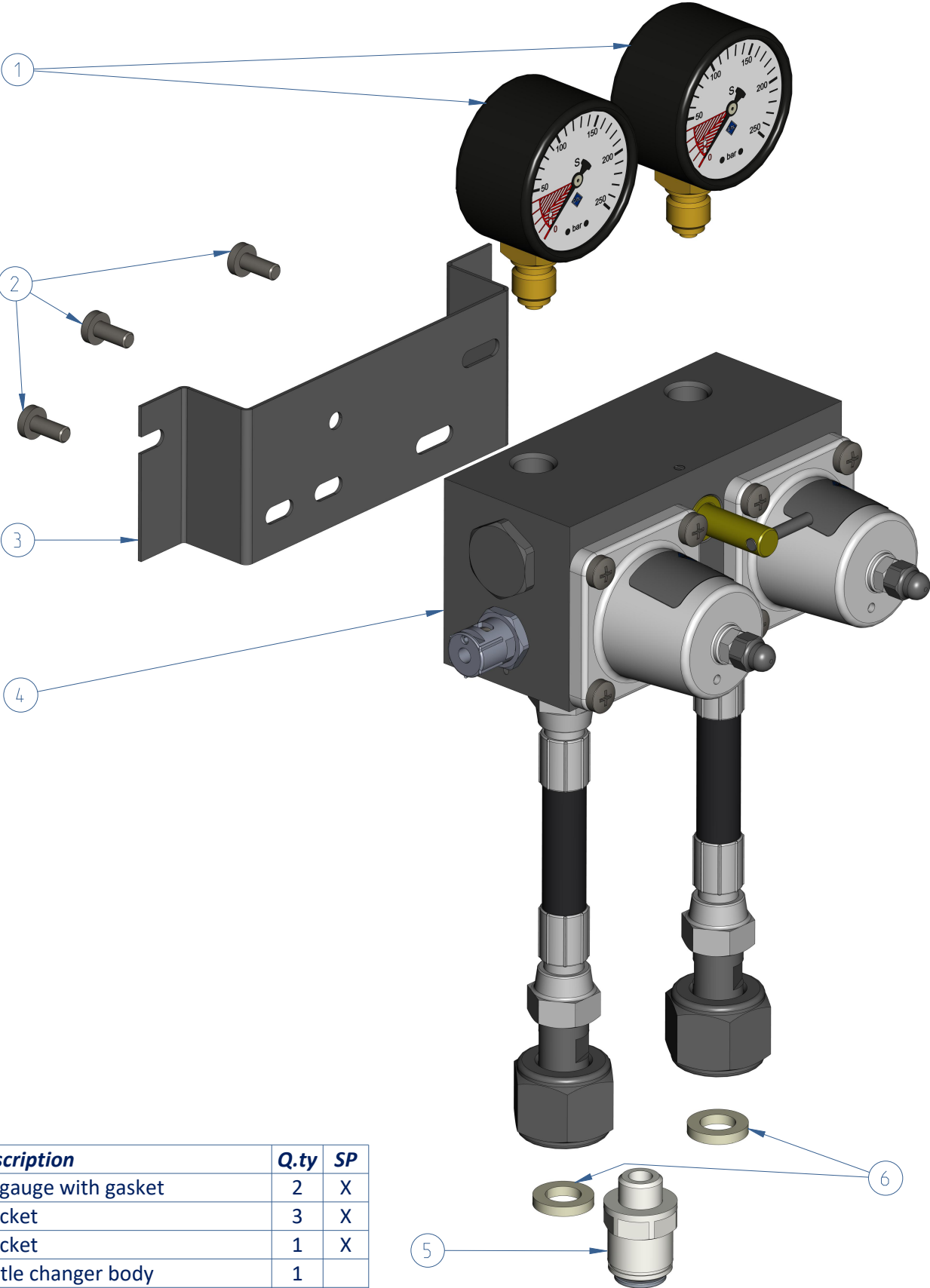
Automatic bottle changer

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BOM and spare parts

Proper operation requires the outlet pressure of both regulators to be adjusted and locked to the factory preset value. Consequently, spare parts do not include pressure setting components. The available spare parts are identified in the “SP” column of the table below. Please contact ODL for further details.



ID	Description	Q.ty	SP
1	HP gauge with gasket	2	X
2	Bracket	3	X
3	Bracket	1	X
4	Bottle changer body	1	
5	Outlets	1	X

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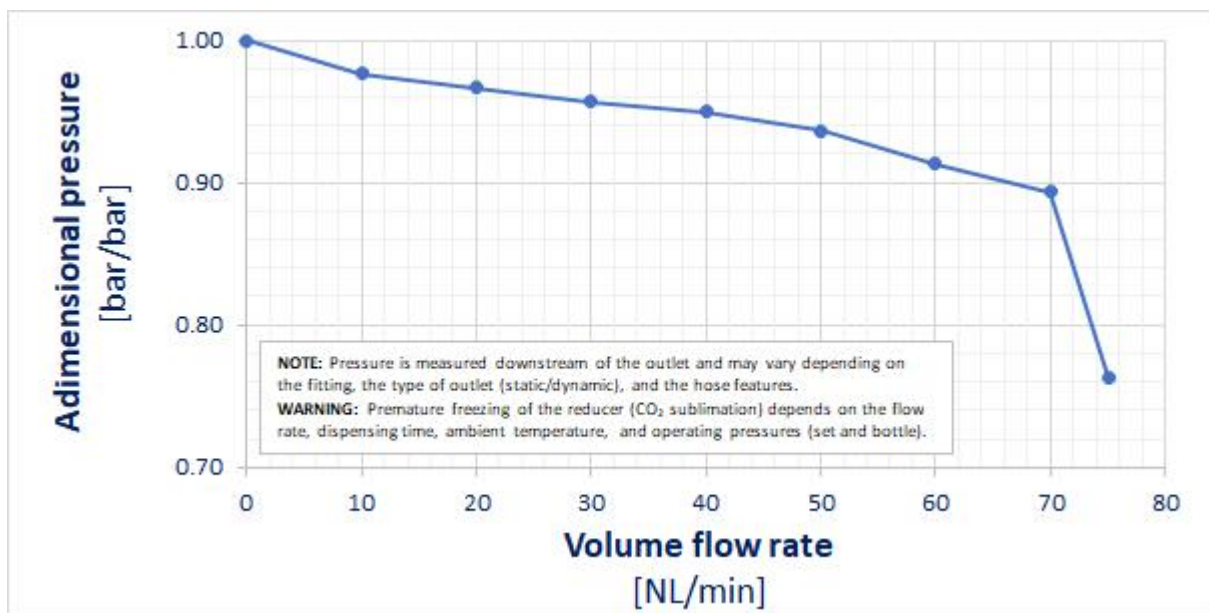


Performance

The plot below presents the pressure reducer's flow characteristic curves, obtained with carbon dioxide.

The value on the vertical axis is the ratio between the measured outlet pressure at a specific flow rate and the corresponding under no-flow condition (set-up pressure).

For example, with a set pressure of 5 bar and a required flow rate of 20 NL/min, the corresponding coefficient from the graph is 0.97. The downstream pressure under operating conditions is obtained by multiplying this coefficient by the set pressure:
 $4.85 \text{ bar} = 0.97 \times 5 \text{ bar}$.



Maintenance, cleaning and sanitization

The information provided below is for guidance only. For complete details, please consult the product's Warnings and Instructions Manual.

The pressure regulator is designed to ensure reliable operation with minimal maintenance. The time interval between two maintenance operations can be influenced by numerous factors, including the working environment, the location, the type of gas used, and the load spectrum. It is recommended to replace the diaphragm, cylinder gasket, and high-pressure valve every 2 years.

If necessary, the external cleaning of the regulator can be done using a cloth and water.

For internal sanitization, ODL recommends verifying the chemical compatibility of the chosen sanitizing fluid with the materials present in the regulator; for guidance on the maximum temperatures and pressures to be used during sanitization, please contact ODL.

Food standards and certifications

This family of pressure reducer is compliant with these community and Italian legislation and their subsequent updates and changes and other international standards:

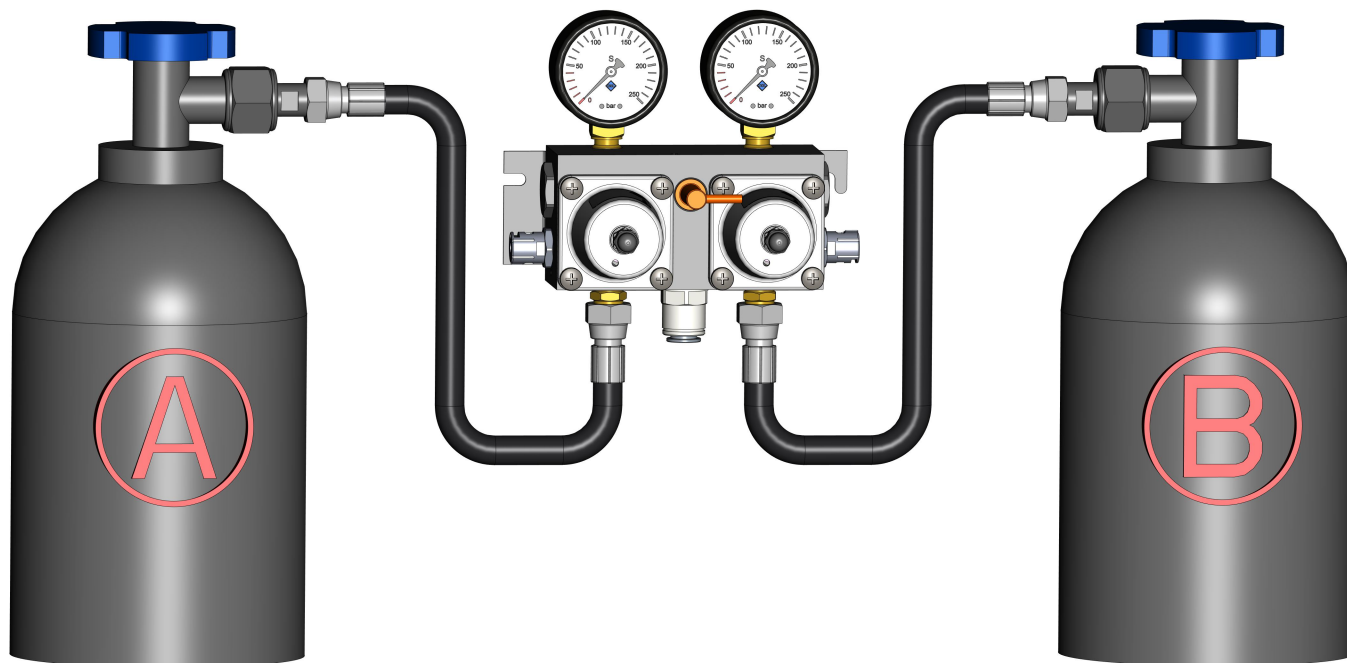
- Regulation (EC) No. 1935/2004,
- Regulation (EC) No. 2023/2006,
- EU Regulation 10/2011,
- D. M. 21/03/1973,
- Presidential Decree 777/82;
- Directive 2014/68/EU.

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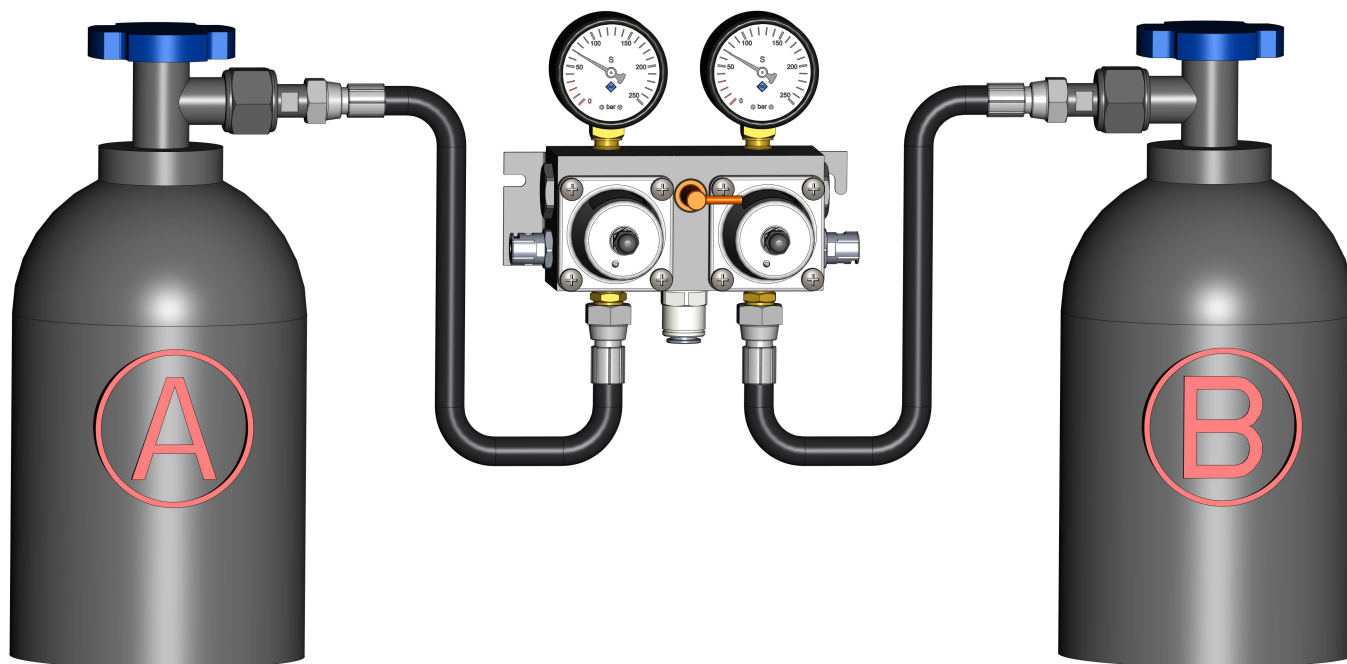
Operating instructions - 1

1) Connect cylinders A and B to the regulator high-pressure lines.



2) Open both cylinders, checking the tightness of the connections and verifying the presence of gas in the regulator by reading the values on the two pressure gauges.

3) With the lever, highlighted in orange, positioned as shown in the figure, the regulator supplies gas from cylinder A at the preset pressure.



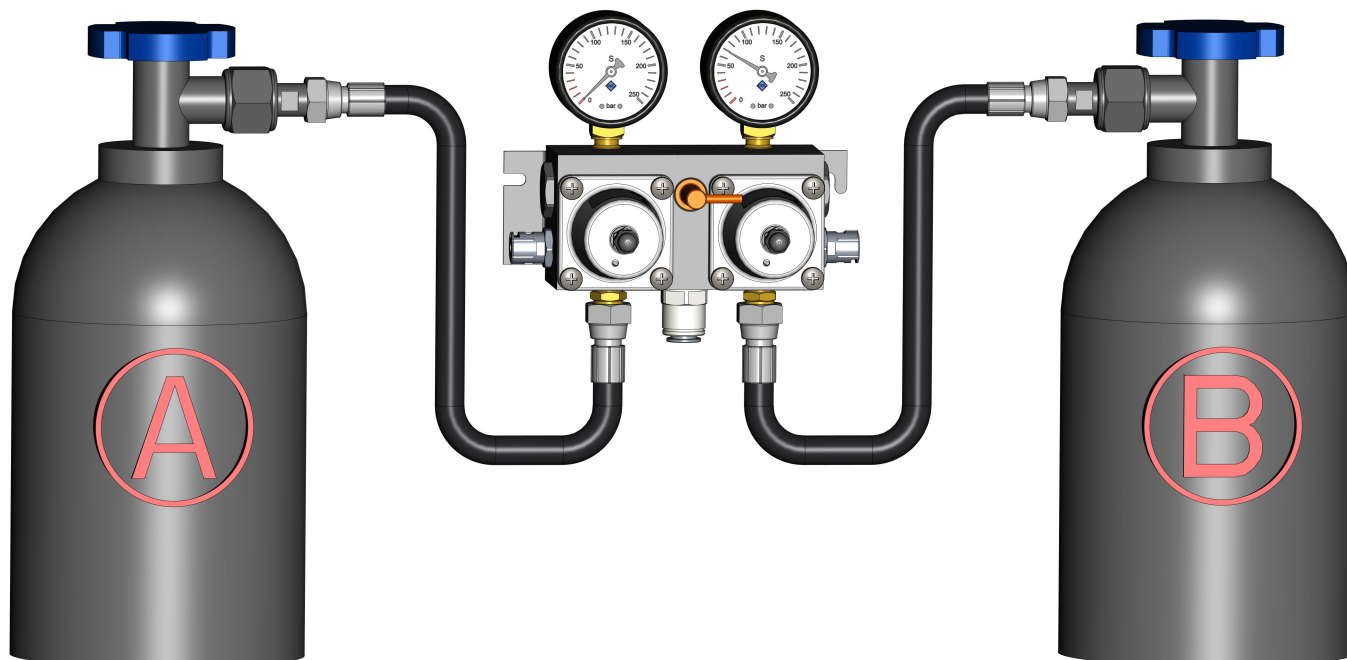
WARNING: The outlet pressure of both regulators must always be adjusted and locked to the same factory preset value. Failure to comply with this requirement will compromise the correct operation of the product.

Automatic bottle changer SA-3334 Datasheet

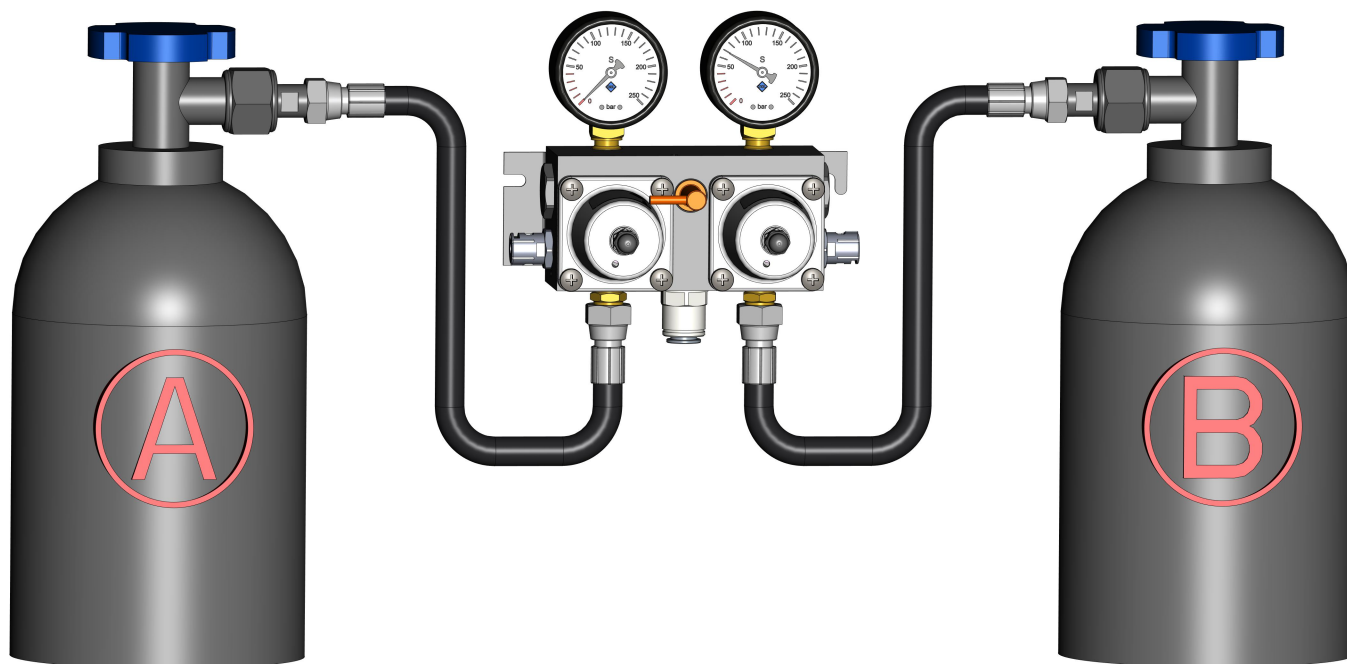


Operating instructions - 2

4) When cylinder A is empty, the regulator automatically starts supplying gas from cylinder B without requiring any manual operation.



5) Replace cylinder A before cylinder B is depleted. This operation must be carried out by closing cylinder A and rotating the lever as shown in the figure. The regulator will continue supplying gas from cylinder B.



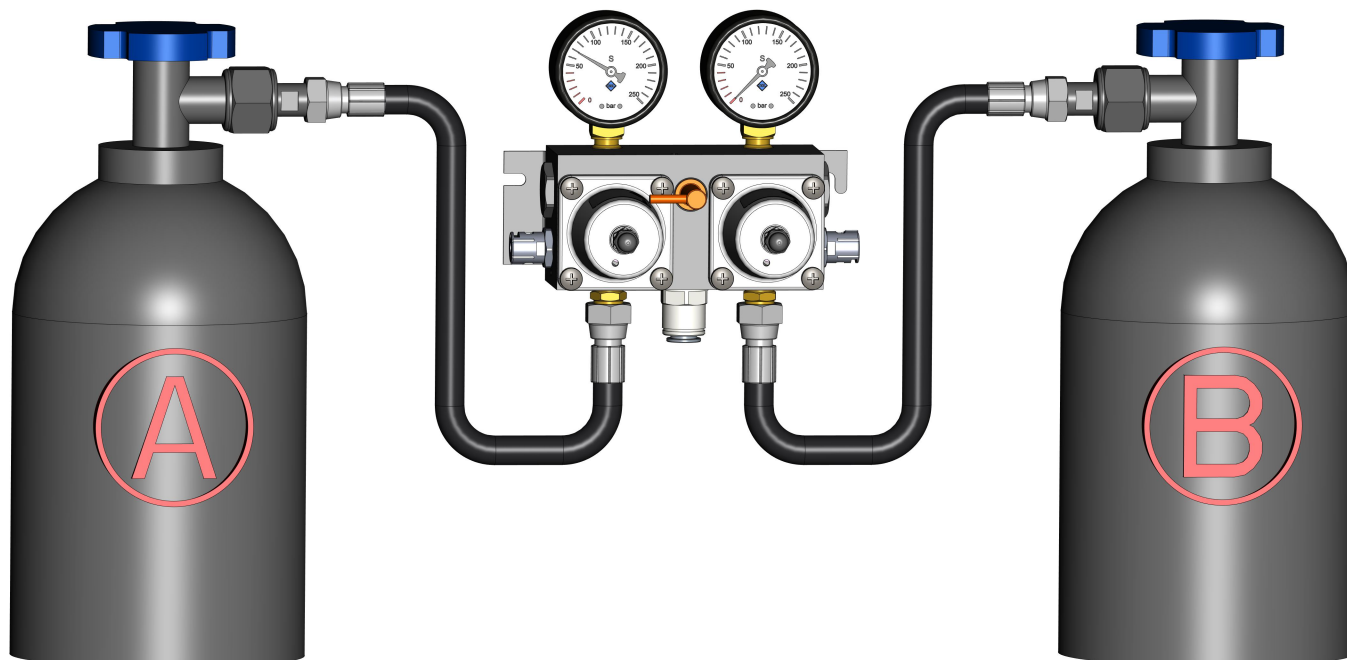
WARNING: The outlet pressure of both regulators must always be adjusted and locked to the same factory preset value. Failure to comply with this requirement will compromise the correct operation of the product.

Automatic bottle changer SA-3334 Datasheet

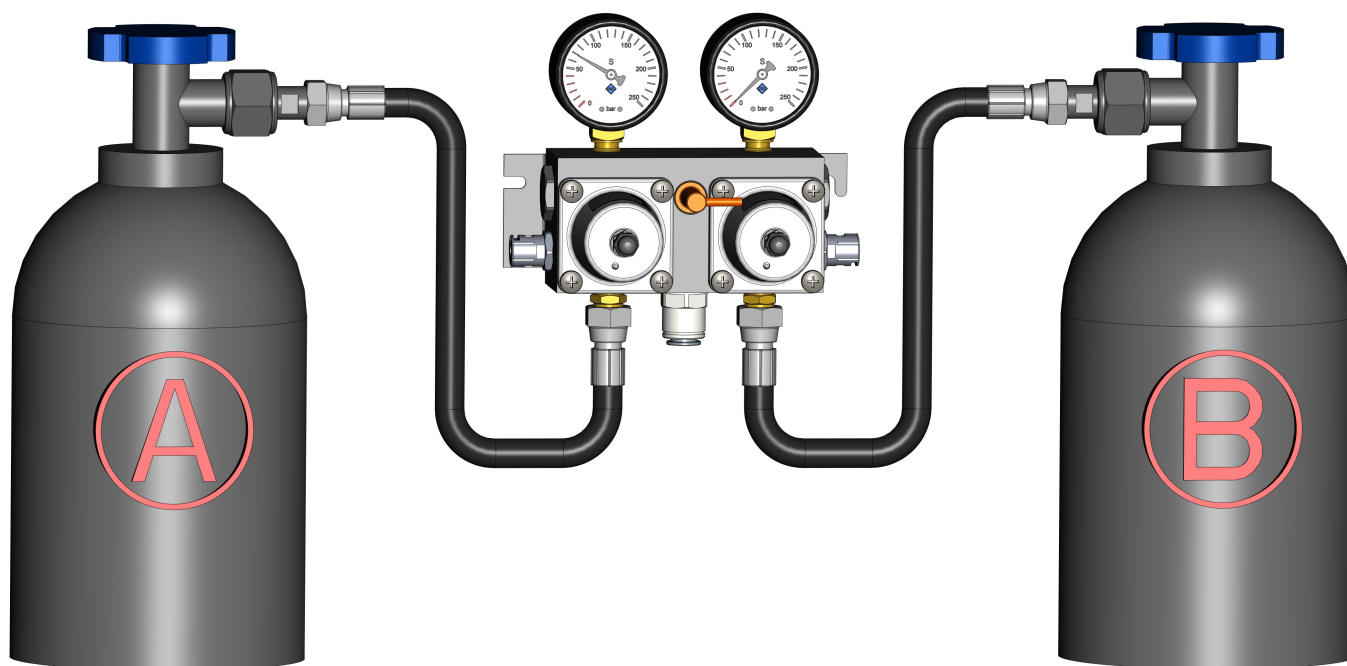


Operating instructions - 3

6) Reopen cylinder A, verifying the presence of gas by reading the pressure gauge and checking the tightness of the connection. The regulator will continue supplying gas from cylinder B until it is depleted.



7) When cylinder B is empty, the regulator will automatically switch back to supplying gas from cylinder A. Replace cylinder B by rotating lever C back to the position shown in the figure in point 2.



WARNING: The outlet pressure of both regulators must always be adjusted and locked to the same factory preset value. Failure to comply with this requirement will compromise the correct operation of the product.