



# The highest reliability in pressure regulation since 1954

Since its foundation the company Boscarol has distinguished itself for the high quality of its solutions, guaranteed by rigorous professionalism and specialised expertise.

Founded in Milan by the entrepreneurial spirit of Leopoldo Boscarol and now led by the third generation, the family-run company is innovative and dynamic but proud to preserve tradition and craftsmanship.

Over the years Boscarol has established a **leading** position in the **manufacture of increasingly sophisticated pressure** regulation instruments such as pressure reducers and economisers. The quality parameters, adopted since 2000 and today certified by European standards, are an integral part of the corporate identity and a guarantee for customers.



## Our numbers, our guarantee

years of experience in the industry



innovative product lines JOOO SOM of production area

key stages

of production

# Innovation, flexibility and improvement

# **Our product lines**

### Economisers and reducers



Find out all the technical Boscarol economisers are a guarantee of safety and financial saving. They restore the normal pressure values, recover excess and return the loss in the normal operating cycle, thus providing safety and economy to the entire system.

Boscarol reducers have the function of conveying fluids directly into the service, by adjusting the different inlet and outlet pressures. The working section of the diaphragm is fourteen times larger than the one of the shutter: such a ratio allows to obtain a very sensitive, precise and constant overflow opening and to comply with the pressure value established downstream.

	ers – Reducers	6,5	15	25
Nominal diameter (ND) Nominal pressure (NP)		6,5 15 25   40 bar / 580 psi 25		
Operating temperatures		-196°C/-321°F ÷ +50°C/+122°F		
Couplings	Threaded	5/8" BSP male	1" BSP male	1"¼ BSP male
	Pocket welded	Ø 12,1 mm	Ø 17,2 / Ø 23,2 mm	Ø 27,6 mm
Maximum adjustment range		1-25 bar	1-35 bar	1-25 bar
Certification		Directive 94/9/UE (ATEX)		





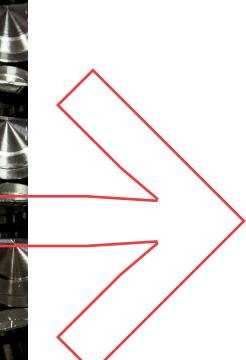
introduced in the early seventies, to more sophisticated instruments such as reducers and economisers. At Boscarol, we do not just guarantee the highest production quality. We ensure customer service and prompt supply of spare parts within 24 hours, constantly up-to-date in-house expertise, tailor-made solutions for specific needs, and a detailed training service for the installation, maintenance and use of our valves.

Every Boscarol product, registered trademark, is characterised by a

very high level of manufacturing precision: from high-pressure gauge

valves to cryogenic valves in support of cold systems, which were





### 1.1 Cryogenic by-passes

Cryogenic by-passes are small in dimensions and positioned in the tank tool block. Available in two versions, with three and four valves, they are suitable for the application on differential pressure measurements as

Cryogenic by-passes with 3 / 4 valves

40 bar / 580 psi

-196°C/-321°F  $\div$  +50°C/+122°F Male/female threaded

1/4 NPT, 1/4 BSP, UNF <sup>1)</sup> Directive 94/9/UE (ATEX)

Nominal pressure (NP)

**Operating temperatures** 

1) Other types of threading on request

Couplings

Certification

they allow the control of the fluid contained in the system.

Find out all the technical specifications

## **Cryogenic valves**



Functional and easy to maintain, our cryogenic valves meet the demands of loading and withdrawal of fluids at very low temperatures in compliance with safety margins. Developed for sensitive application needs, they are made totally free of all traces of grease.

Cryogenic valves				
Series	CRIO	CRIO 300	BOSCAROL	CRIO RITEGNO
Nominal diameter (ND)	6 ÷ 50	65 ÷ 150	6 ÷ 40	10÷50
Nominal pressure (NP)	40	50	40	40
Operating temperatures	-196°C ÷ +50°C	-196°C ÷ +75°C	-196°C ÷ +50°C	-196°C ÷ +50°C
Connections	Welded BW/SW, flanged, threaded	Welded BW, flanged	Threaded	Welded BW/SW, flanged, threaded
Certification	94/9/UE (ATEX); 2014/68/UE (PED); 2010/35/UE (T-PED)			

DN.20 PN.40 ASTMA479-304

(1) only for threaded collars



Support accessories for cryogenic applications that allow to connect various pipes to each other. They are composed of two spherical seal spigots and are interconnected by a threaded union. Effective seal is obtained from the convex-conical connection.



Passage mm (inch)	8 (1/4") - 15 (1/2") - 20 (3/4") - 25 (1"
Nominal pressure (NP)	40 bar / 580 psi
Operating temperatures	-196°C/-321°F ÷ +50°C/+122°F
Reference standards	ASME/ANSI: B16.34, B16.11, B16.25





Three-piece joints



## **Gauge valves**





Developed for high pressures and sudden temperature changes, Boscarol gauge valves are ideal for adjusting or interrupting the flow of supply or exhaust fluids, thus supporting pressure gauges. Also being considered as shut-off valves, they are made of high-quality materials.

Gauge valves				
Series		Brass 2/3 ways	Carbon steel 2/3 ways	Stainless steel 2/3 ways
Passage		Ø 3 mm <sup>1)</sup>		
Operating limit	PTFE	125 bar - 100°C	250 bar - 100°C	400 bar - 100°C
	GRAPHITE	125 bar - 200°C	120 bar - 300°C	120 bar - 400°C
Couplings		Threaded male/female (NPT, BSP, BSPT, API) <sup>2)</sup>		
Certification		Directive 94/9/UE (ATEX)		
1) Also Ø 4.5 mm		2) Other thread types on request		

#### 3.1 2-way manifold

Find out all the technical specifications

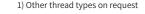
It comes in the shape of a double pressure gauge valve, aimed at containing the operating costs on measuring systems and at obtaining a saving by using double valves with different nipples and unions. The threaded bleeding hole allows drainage through a pipe and hence fluid recovery.

2-way manifold		
Passage		Ø 3 mm
	PTFE	200 bar - 100°C
Operating limit	GRAPHITE	120 bar - 350°C
Couplings	Threaded female inlet/outlet: 1/2 NPT Female threaded bleeding hole: 1/4	
Certification	Directive 94/9/UE (ATEX)	

#### 3.2 3-way manifold

In systems including a shunt route in a distribution circuit, it momentarily allows not to reduce the potential of the system, thus excluding performance drops and thereby creating an alternative route.

3-way manifold			
Passage		Ø 3 mm	
	PTFE	200 bar - 100°C	
Operating limit	GRAPHITE	120 bar - 400°C	
Couplings		Threaded mal /female (NPT, BSP) <sup>1)</sup>	
Certification		Directive 94/9/UE (ATEX)	
1) Other thread types on request			



Find out all the technical specifications

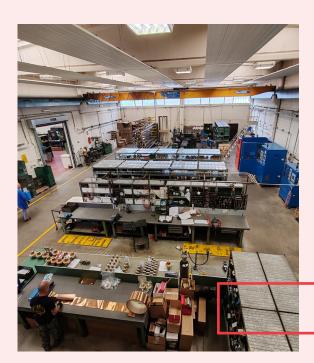


# Solutions for various sectors



Thanks to our great productive and organisational flexibility, we can meet the most varied demands of the **cryogenic, oil & gas, naval, chemical, food, pharmaceutical, mechanical sectors,** and many others, both for large and small batches, with maximum compliance to agreed deadlines. Production flexibility, expertise and high technological performance are the factors that enable us to successfully approach the most diverse businesses.

## **Machine fleet**



A state-of-the-art machine fleet, the best technology in the sector and an ever-growing production area of 1,000 square metres are a guarantee of the highest quality levels in Boscarol products. Numerically controlled lathes and cutting-edge technological equipment contribute to the achievement of extreme manufacturing precision.

# A quality-oriented production process



At Boscarol every stage of the production process is quality and innovation - oriented. Starting from the selection of certified raw materials to the final packaging, the imperative is to guarantee the highest possible degree of customer satisfaction.

- **1. Raw materials check:** selection, verification and traceability of certified materials
- 2. Processing: bar cutting, turning and finishing
- **3. Cleaning:** cleaning of components with dedicated ultrasonic washing machine
- 4. Assembly: assembly and laser marking to ensure complete traceability
- 5. **Testing:** 100% pneumatic testing of each valve before packaging
- 6. **Packaging:** specific packaging choice to be consistent with the valves' final application

#### **BOSCAROL S.r.l.**

20021 OSPIATE DI BOLLATE (MI) Italy | Via Stelvio, 12/9 Tel. +39 02 3503554 Fax +39 02 3590490 www.boscarol.net - commerciale@boscarol.net