

TECHNICAL CATALOGUE

CAT-PIG-EN

10.2023



HYGIENIC VALVES FOR PIGGING SYSTEMS

BBZPPG SINGLE SEAT VALVE

B93JPG DOUBLE SEAT VALVE

BZAW3PG DOUBLE SEAL VALVE

QUALITY, INDUSTRIAL EFFICIENCY, PRODUCT RELIABILITY

The combination of technology, product customization and attention to details makes Bardiani Valvole an extraordinary supplier in its flexibility and ability to meet customer requests.

The standards achieved through experience and a process of continual improvement make it possible to reach maximum reliability. What is more, continual improvement allows Bardiani Valvole to take decisive steps forward also in offering increasingly competitive solutions.

Valves designed for every kind of applications



HYGIENIC VALVES FOR PIGGING SYSTEMS

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SINGLE SEAT VALVE FOR PIGGING SYSTEMS

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Overview

Description and optional

Technical data

Valve body configurations

Dimensions

Seal pressures

DOUBLE SEAT VALVES FOR PIGGING SYSTEMS

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Overview

Working

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Overview

Working

Technical data

Valve body configurations

Dimensions

Seal pressures

DOUBLE SEAL VALVE FOR PIGGING SYSTEMS

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Overview and description

Description and working

Technical data

Valve body configurations

Dimensions

Seal pressures

VARIANT

| | |
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|--------------------------|-----------|

| | |
|------------------------------|-----------|
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UNIQUE FEATURES FOR QUALITY VALVES

Certified hygienic standards

All parts in contact with the product are made from AISI 316L stainless steel.

<0.8 μm surface finish on parts in contact with the product (0.4 μm on request).

To guarantee greater resistance and long lasting life **valve bodies made from solid bar**. Sealing solutions are all certified: Bardiani Valvole selects only European suppliers able to provide **reliable seals**.



Easy maintenance valves design

No special tools are required for maintenance, which saves time and **increase cost-effectiveness**.

Spare parts are guaranteed over time thanks to the Bardiani Care program.

Bardiani care is a flexible made-to-measure after-sales service program based on client needs which includes preventive maintenance, technical training and continual technical support.

Valve clusters and customized solutions

The combination of technology, product customization and attention to details makes Bardiani Valvole an extraordinary supplier in its **flexibility** and ability to meet customer requests.

Bardiani **clusters** are made according to the customer's specific design, orbital welded, passivated and tested.

Thanks to the excellent product quality and the maximum responsiveness to the customer's needs, the valve clusters are one of the strong points of the Bardiani Valvole production range.

Social values

Respect for the founding values is also important from a business point of view. Being loyal to one's team and the commitments made means, amongst other things, being able to guarantee punctual delivery 97% of the time. On another level, focus on continuous improvement also allows us to establish enormously profitable and long-lasting collaboration with our customers because it promotes constant evolution. As well as the technical values, for Bardiani it is also essential to respect those values which have always distinguished the company's identity: honesty, respect, solidarity and social responsibility.



**GUARANTEED
ASSISTANCE
FOR EVERY
BARDIANI VALVES
IN THE WORLD**

Sustainability for a better future

Environmental sustainability, social sustainability and economic sustainability, the pillars on which the company develops and outlines its present and its future.



SINGLE SEAT VALVE BBZPPG

Pneumatic single seat valve for pipping systems



DOUBLE SEAT VALVES B93JPG

Pneumatic double seat valve for pipping systems

B93JPG REVERSE

Pneumatic double seat valve for pipping systems and reversed installation

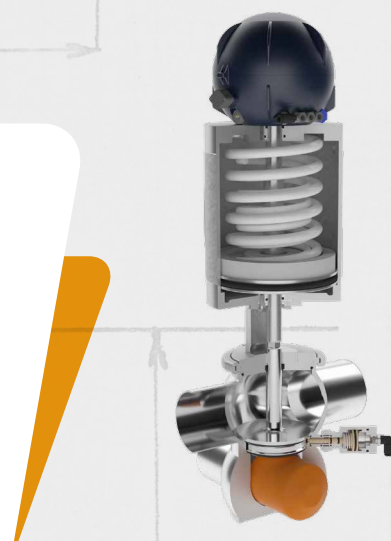


Wide range of applications

- Beverage
- Food
- Confectionery
- Paint and coatings
- Pet food
- Homecare & household
- Personal care & beauty
- Chemicals & lubricants

DOUBLE SEAL VALVE FOR PIGGING SYSTEMS BZAW3PG

Pneumatic double seal valve for pipping systems



VARIANTS PIG STOPPER

PIG stopper



Customized valves on request

On request all accessories are available for all sizes of valve and body configurations. Additionally special ports, diameters and other tailor-made solutions are available.

Bardiani Valvole can also provide technical support, advice and feasibility analysis for other requests.

SPECIALIST VALVES FOR HYGIENIC AND SANITARY PIGGING

Liquid product recovery (pigging system) is used after a product transfer to **remove or recover residual liquid product** remaining in the pipeline of a process system.

Process pigging technology has been widely adopted by **food, beverage, homecare, paint, personal care, and pet food plants** throughout the world.

It's an extremely effective way to **increase product yields, cut waste, speed up changeover times, improve profits and boost environmental sustainability.**

Hygienic (sanitary) pigging systems are made up of variety of different parts and components: valves are an important aspect that enable the **safe and effective running** of a pigging system.

BARDIANI VALVOLE SOLUTION

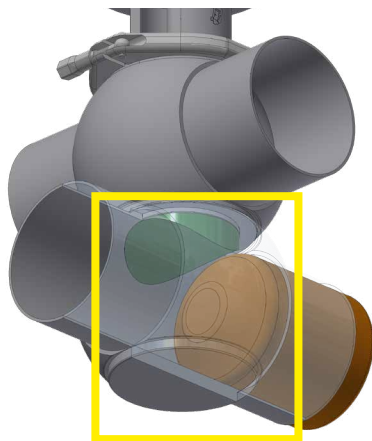
Piggable valves enable the smooth passage of the hygienic plug ('pig') thanks to special design of solid bodies and shutter.

The valves have a bore the same as that of the pipe and have no obstructions in closed position, too.

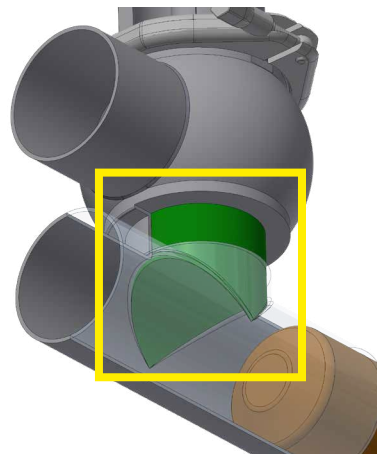
This enables the pig, when propelled through the pipeline to easily fit through the valves.

MINIMAL DEAD-SPACE VALVE TO MAXIMIZE PRODUCT RECOVERY

Specially designed valve body allows maximum product recovery from 30% up to 60% more, compared to standard single seat valve.



BBZPPG
Single seat valve for pigging system - internal view



BBZP
Single seat valve with T butt weld fitting

Sustainability of production processes

The pigging systems recover massive amounts of product residue from the main transfer paths which increases product yields and reduces waste significantly.

The pigging and liquid transfer equipment includes various specialist valves such as the unique minimal dead-space valve.

Valves are key components to ensure maximum recovery.

VALVES FOR MAXIMISING PRODUCT RECOVERY

Bardiani unique minimal dead-space valves ensure:

- **Maximization of product recovery.**
- **Easily changeable seals** without the need for special tool.
- By **reducing waste**, water use, cleaning chemical use and subsequent disposal costs, it also helps towards the company's environmental sustainability goals.

MAIN BENEFITS

- 1 Designed and **precision-engineered** for pigging systems
- 2 Minimal dead-space valve to maximize **product recovery**
- 3 **Sturdiness** thanks to valve body and shutter made from stainless steel **solid bar**
- 4 **Maximum flexibility** thanks to different DN sizes
- 5 **Minimum number of seals** in contact with the product
- 6 **Easy maintenance** without use of special tools



CERTIFIED SEALING SOLUTIONS

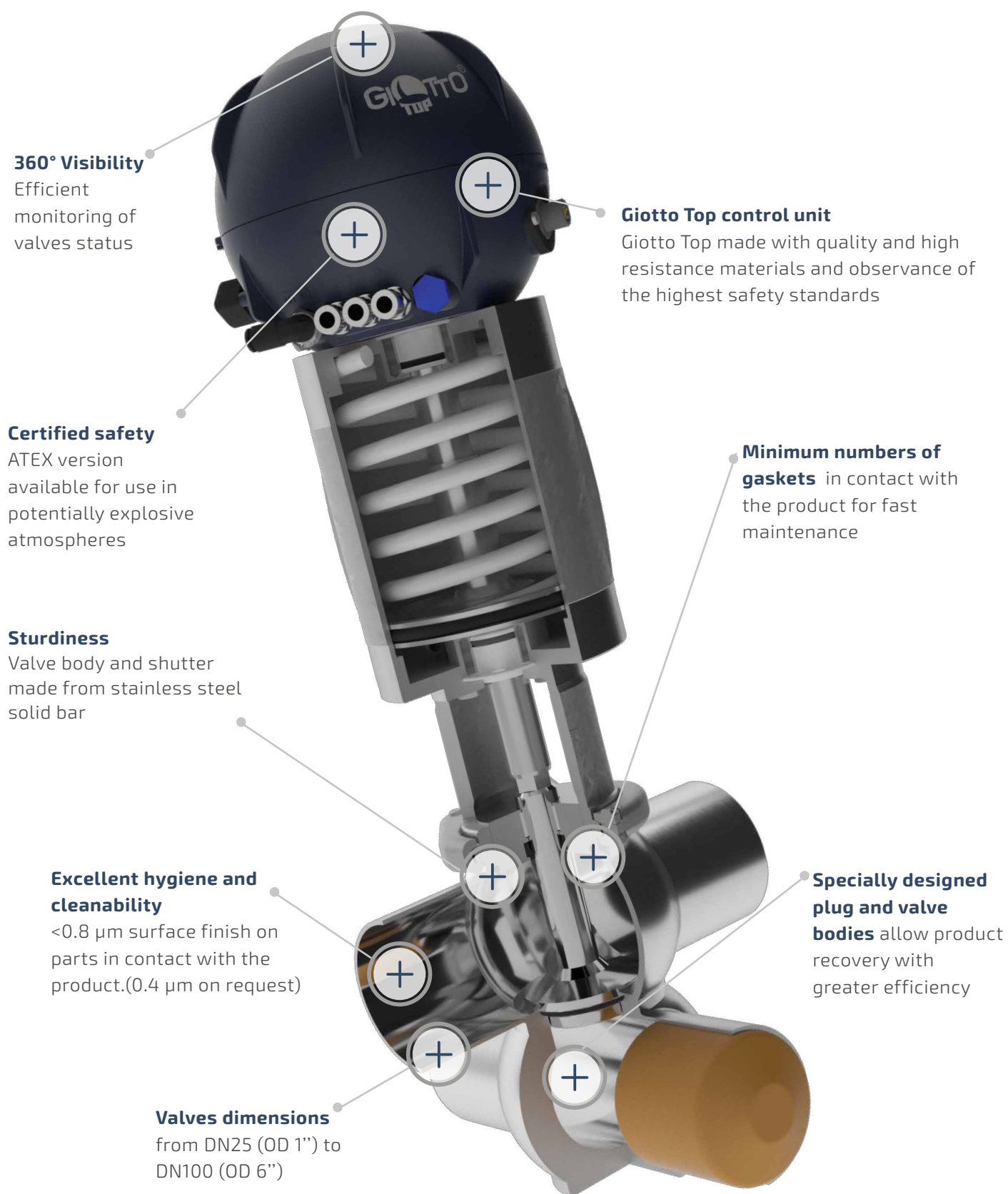
In order to manufacture reliable and high quality products, Bardiani Valvole select only European partners able to supply certified, reliable and long-lasting seals. These are sealing solutions provided for valves for pigging systems:

EPDM is a polymer composed of ethylene, propylene and a small percentage of a diene and is particularly well-suited for applications involving polar media. It has an outstanding resistance to water and aqueous systems.

HNBR is distinguished by its resistance to greases, waxes and oils and for this reason, it is used in systems in which these media are contained or controlled.

FKM is a fluorinated material with a monomer composition, thanks to its good swelling resistance towards aliphatic and aromatic hydrocarbons, oils and greases.

BBZPPG SINGLE SEAT VALVE OVERVIEW



CERTIFICATIONS



DESCRIPTION

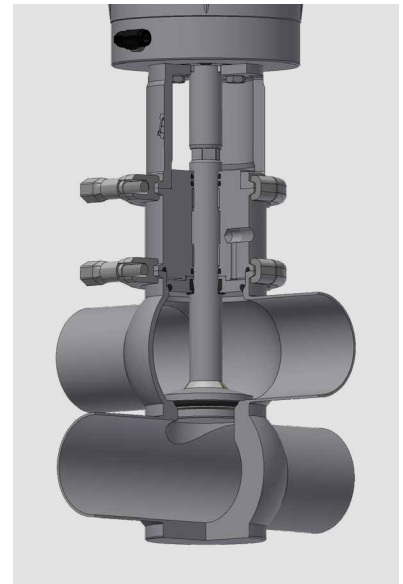
BBZPPG single seat valve enables simple, fast, and effective cleaning and product recovery.

Unlike standard valves, it features minimal dead-space which ensures maximum product recovery. It has been specially designed and engineered for applications with extremely high cleaning, sanitising and hygiene requirements. Fully piggable, the valve offers high levels of performance, reliability and effectiveness.

OPTIONS

- **STEAM BARRIER**

A steam barrier is recommended for hygiene applications where high sterilisation temperatures are used to maintain product asepticity.



- **DIAPHRAGM**

The use of a diaphragm inside the valve body allows to obtain a safe separation between the product inside the valve and the external environment.





VALVE STRUCTURE





| | | |
|---|---|--|
| Connections from DN25 to DN100 | DIN, SMS, IDF, BS (RJT), Clamp, Flange | Other connections on request |
| Material in contact with the product | AISI 316L (1.4404) | Other material on request |
| Material gaskets in contact with the product (FDA homologation) | EPDM, FKM, HNBR | Other material on request |
| Max product temperature (EPDM applications with air) | 140 °C (284 °F) | For other temperature, please ask Bardiani Valvole |
| Min product temperature (EPDM applications with air) | -10 °C (14 °F) | |
| Max product pressure | 10 bar (145 psi) | |
| Max working pressure | See table | |
| Finish on surfaces in contact with the product | Ra 0.8 μm (other types of surface finish on request). | |
| Diaphragm material | P.T.F.E. in contact with product | |

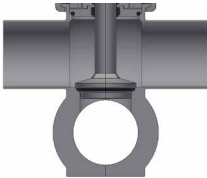
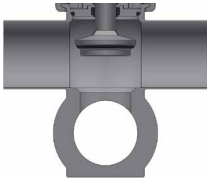
PNEUMATIC ACTUATOR STRUCTURE


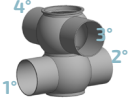
| | |
|-------------------|--|
| Air connectors | 1/8" (BSP) for pipe 6 x 4 mm |
| Air pressure | From 6 bar (87 psi) to 8 bar (116 psi) |
| Cylinder material | AISI 304 (1.4301) |
| Gasket material | NBR |

CERTIFICATIONS



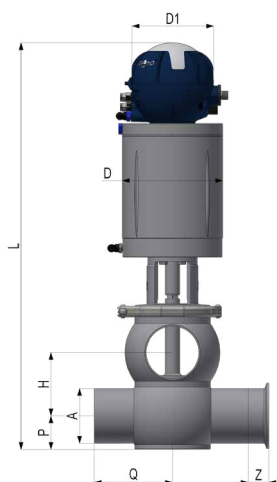
| VALVE BODIES CONFIGURATIONS | | | |
|---|---|---|---|
| M8-0° TL | M8-90° TL | M8-0° TT | M8-90° TT |
|  |  |  |  |

| CLOSED | OPEN |
|---|---|
|  |  |

| Legenda | |
|---|--|
|  | Reccomended flow direction |
|  | 1° - 2° - 3° - 4° examples of ends connections readings with different types and/or dimensions |

BBZPPG DIMENSIONS

BBZPPG



Legenda

| | |
|-----|------------|
| S/S | Welding |
| F/F | Male |
| - | on request |

| | S/S | | | | | | | F/F |
|-----|--------|-------|-----|-------|-------|------|-----|-----|
| DN | A | D | D1 | H | L | P | Q | Z |
| 25 | 29x1.5 | 59 | 114 | 37.5 | 366 | 23 | 65 | 35 |
| 40 | 41x1.5 | 89.5 | 114 | 49.5 | 402 | 29 | 70 | 33 |
| 50 | 53x1.5 | 89.5 | 114 | 61.5 | 426 | 35 | 85 | 35 |
| 65 | 70x2 | 114.5 | 114 | 77.5 | 508.5 | 43 | 95 | 40 |
| 80 | 85x2 | 114.5 | 114 | 92.5 | 538.5 | 50.5 | 105 | 45 |
| 100 | 104x2 | 140 | 145 | 111.5 | 624 | 60 | 120 | 54 |

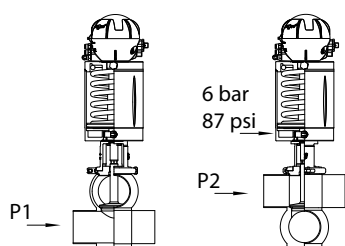
| | S/S | | | | | | |
|--------|----------|-------|-----|-------|-------|------|-----|
| OD | A | D | D1 | H | L | P | Q |
| 1" | 25.4x1.5 | 59 | 114 | 33.9 | 366 | 24.9 | 65 |
| 1" 1/2 | 38.1x1.5 | 89.5 | 114 | 46.7 | 402.5 | 30.4 | 85 |
| 2" | 50.8x1.5 | 89.5 | 114 | 59.3 | 426 | 36 | 85 |
| 2" 1/2 | 63.5x1.5 | 114.5 | 114 | 71.1 | 503 | 41 | 95 |
| 3" | 76.1x2 | 114.5 | 114 | 83.7 | 530 | 47 | 105 |
| 4" | 101.6x2 | 140 | 145 | 109.1 | 624 | 61 | 120 |

| | S/S | | | | | | | CLAMP |
|--------|------------|-------|-----|-------|-------|------|-----|-------|
| OD | A | D | D1 | H | L | P | Q | Z |
| 1" | 25.4x1.65 | 59 | 114 | 33.7 | 366 | 24.9 | 65 | 12.7 |
| 1" 1/2 | 38.1x1.65 | 89.5 | 114 | 46.3 | 402.5 | 30.4 | 85 | 12.7 |
| 2" | 50.8x1.65 | 89.5 | 114 | 59.1 | 426 | 36 | 85 | 12.7 |
| 2" 1/2 | 63.5x1.65 | 114.5 | 114 | 71.7 | 503 | 41 | 95 | 12.7 |
| 3" | 76.2x1.65 | 114.5 | 114 | 84.5 | 530 | 47 | 105 | 12.7 |
| 4" | 101.6x2.11 | 140 | 145 | 109.1 | 624 | 61 | 120 | 15.8 |

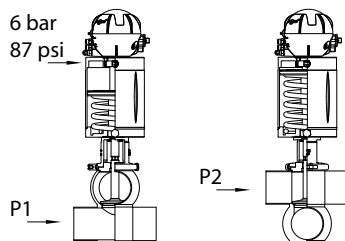
Other dimensions on request

Legenda

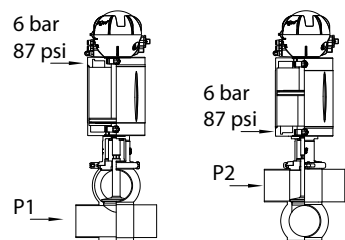
| | |
|----------|---|
| S.A.N.C. | Valve normally closed with single acting actuator (air opens/spring closes) |
| S.A.N.O. | Valve normally opened with single acting actuator (air closes/spring opens) |
| D.A. | Valve with double acting actuator (air opens/air closes) |
| cyl. | Cylinder size |



| S.A.N.C. | | | | |
|----------|-----------|------|------------|------------|
| DN | INCHES/OD | cyl. | P1 bar/psi | P2 bar/psi |
| 25 | 1" | 59 | 8/116 | 10/145 |
| 40 | 1" 1/2 | 83 | 10/145 | 10/145 |
| 50 | 2" | 83 | 9/130 | 10/145 |
| 65 | 2" 1/2 | 108 | 9/130 | 10/145 |
| 80 | 3" | 108 | 5/72 | 6/87 |
| 100 | 4" | 134 | 6/87 | 6/87 |



| S.A.N.O. | | | | |
|----------|-----------|------|------------|------------|
| DN | INCHES/OD | cyl. | P1 bar/psi | P2 bar/psi |
| 25 | 1" | 59 | 9/130 | 10/145 |
| 40 | 1" 1/2 | 83 | 10/145 | 10/145 |
| 50 | 2" | 83 | 9/130 | 10/145 |
| 65 | 2" 1/2 | 108 | 9/130 | 10/145 |
| 80 | 3" | 108 | 4.5/65 | 6.5/94 |
| 100 | 4" | 134 | 4.5/65 | 8/115 |



| D.A. | | | | |
|------|-----------|------|------------|------------|
| DN | INCHES/OD | cyl. | P1 bar/psi | P2 bar/psi |
| 25 | 1" | 59 | 10/145 | 10/145 |
| 40 | 1" 1/2 | 83 | 10/145 | 10/145 |
| 50 | 2" | 83 | 10/145 | 10/145 |
| 65 | 2" 1/2 | 108 | 10/145 | 10/145 |
| 80 | 3" | 108 | 10/145 | 10/145 |
| 100 | 4" | 134 | 10/145 | 10/145 |

B93JPG DOUBLE SEAT VALVE OVERVIEW

360° Visibility

Efficient monitoring of valves status.

Giotto Top

Control unit made with quality and high resistance materials and observance of the highest safety standards

Certified safety

Available ATEX version, available for use in potentially explosive atmospheres.

Drain outlet

Strength

Valve body and plug made from solid bar

Excellent hygiene and cleanliness

<0.8 µm surface finish on parts in contact with the product.(0.4 µm on request)

Small auxiliary valve

Ensure an immediate leakage detection

Valve size from DN40 (OD 1,5") to DN100 (OD 4")

Especially designed valve body allow product recovery with greater efficiency

CERTIFICATIONS



DESCRIPTION

B93JPG enables complete and safe separation between two fluids and recovery of the product with PIG.

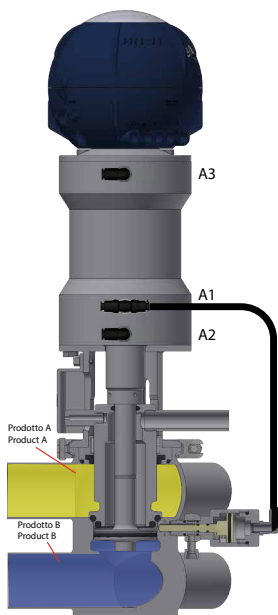
The lower body is specially designed to enable the smooth passage of the PIG; the upper body might have 1 or 2 horizontal ports.

The upper shutter has an axial seal while the lower one has a radial seal.

B93JPG may be installed vertical or suspended.

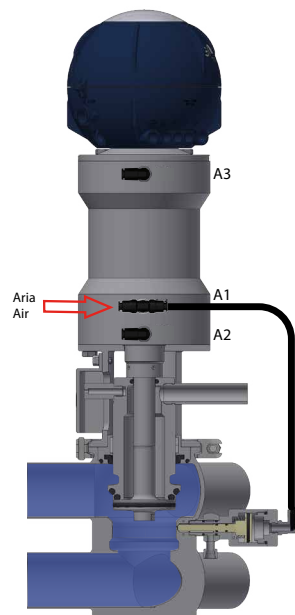
When vertical installed, CIP is draining by the port above the bodies and by the auxiliary valve.

WORKING PRINCIPLE



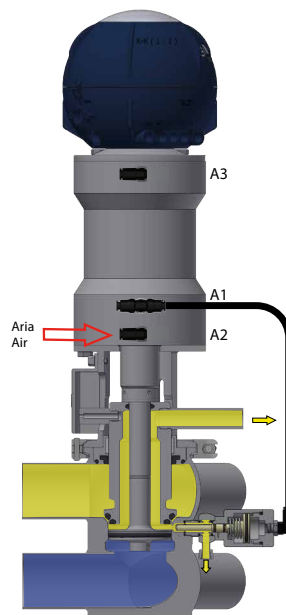
CLOSED VALVE

The product and the CIP are separated by the plugs, any leakage will flow out through the leakage duct, without contamination of the other line.



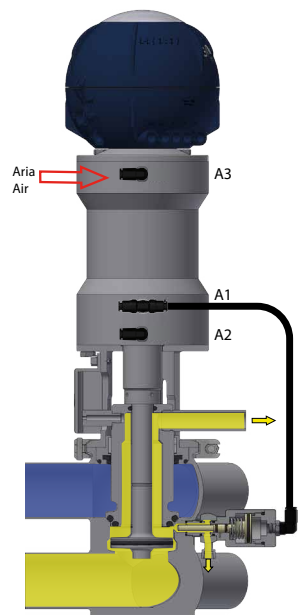
**VALVE CLOSING
(inlet air 1)**

The lower plug lifts, pushing the upper one, and closes the access to the drainage duct, causing full opening of the valve. During this phase, the radial seal fitted in the lower plug gives a complete seal without any product leakage.



**CLEANING
OF UPPER SEAT
(inlet air 2)**

During the body cleaning phase, partial lifting (not adjustable stroke) of the upper plug allows the cleaning of the plugs, seats and draining ducts, flowing through the leakage detector.



**CLEANING OF
LOWER SEAT
(inlet air 3)**

During the body cleaning phase, partial lifting of the lower plug (not adjustable stroke) allows the cleaning of the plugs, seats and draining ducts.

DOUBLE SEAT VALVE B93JPG REVERSE OVERVIEW

Valve size from
DN40 (OD 1,5") to
DN100 (OD 4")

**Especially designed
valve body** allows
product recovery with
greater efficiency

Strength
Valve body and plugs
made from solid bar

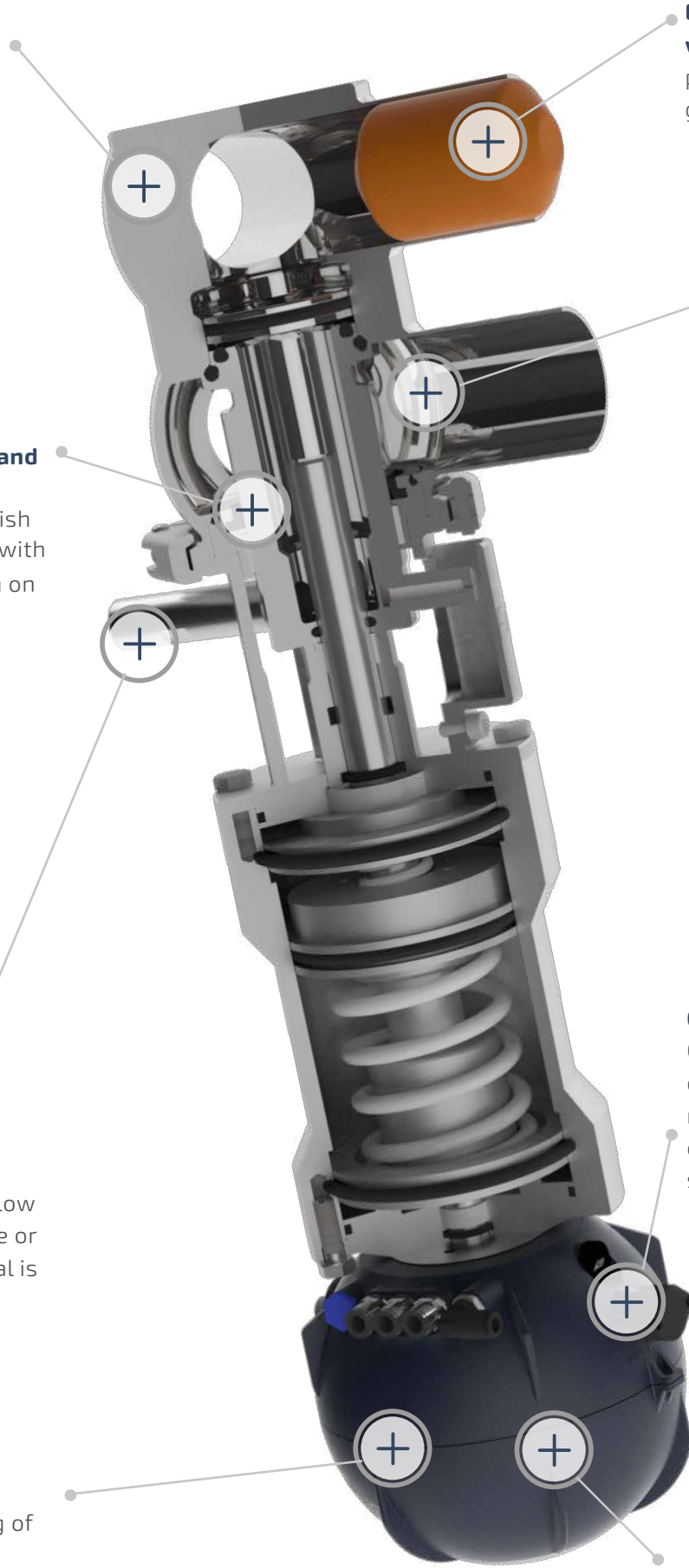
**Excellent hygiene and
cleanability**
<0.8 µm surface finish
on parts in contact with
the product.(0.4 µm on
request)

Drain outlet
Allow the product flow
during the lift phase or
when one of the seal is
broken.

360° Visibility
Efficient monitoring of
valves status.

Giotto Top
Control unit made with
quality and high resistance
materials and observance
of the highest safety
standards

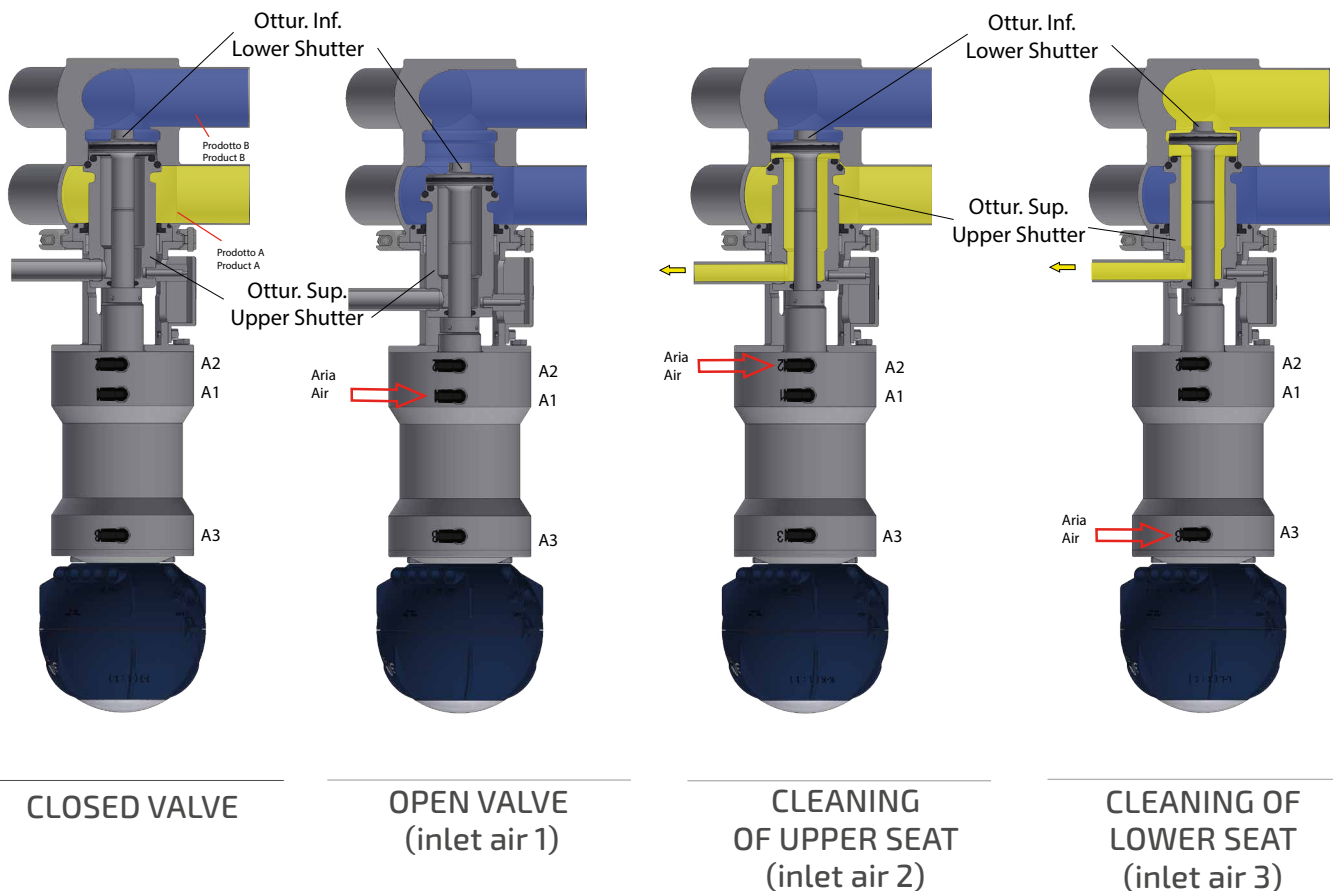
Certified safety
Available ATEX version,
available for use in
potentially explosive
atmospheres.



DESCRIPTION

B93JPG REVERSE enables complete and safe separation between two fluids and recovery of the product with PIG. The upper body is specially designed to enable the smooth passage of the PIG; the upper body might have 1 or 2 horizontal ports. The upper plug has an axial seal while the lower one has a radial seal. B93JPG REVERSE is ideal for vertical installation with actuator positioned in the lower part. When vertical installed, CIP is draining by the drain outlet above the bodies.

WORKING PRINCIPLE



The product and the CIP are separated by the plugs, any leakage will flow out through the leakage duct, without contamination of the other line.

The lower plug lifts, pushing the upper one, and closes the access to the drainage duct, causing full opening of the valve. During this phase, the radial seal fitted in the lower plug gives a complete seal without any product leakage.

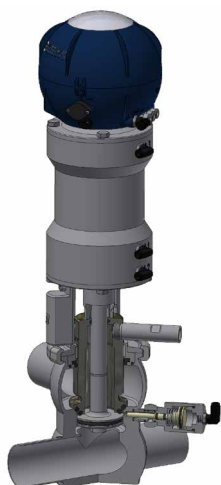
During the body cleaning phase, partial lifting (not adjustable stroke) of the upper plug allows the cleaning of the plugs, seats and draining ducts, flowing through the leakage detector.

During the body cleaning phase, partial lifting of the lower plug (not adjustable stroke) allows the cleaning of the plugs, seats and draining ducts.

B93JPG - B93JPG REVERSE

TECHNICAL DATA

B93JPG



B93JPG REVERSE



VALVE STRUCTURE

| | | |
|---|---|--|
| Connections from DN40 to DN100 | DIN, SMS, IDF, BS (RJT), Clamp, Flange | Other connections on request |
| Material in contact with the product | AISI 316L (1.4404) | Other material on request |
| Material gaskets in contact with the product (FDA homologation) | EPDM, FKM, HNBR | Other material on request |
| Max product temperature (EPDM applications with air) | 140 °C (284 °F) | For other temperature, please ask Bardiani Valvole |
| Min product temperature (EPDM applications with air) | -10 °C (14 °F) | |
| Max product pressure | 10 bar (145 psi) | |
| Max working pressure | See table | |
| Finish on surfaces in contact with the product | Ra 0.8 μm (other types of surface finish on request). | |

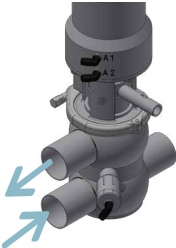



PNEUMATIC ACTUATOR STRUCTURE

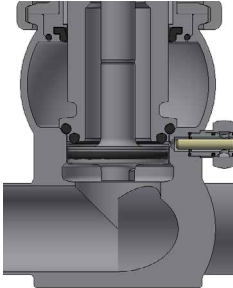
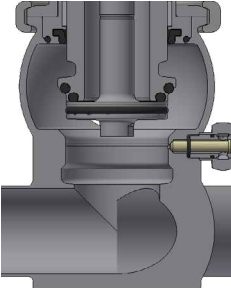
| | |
|-------------------|--|
| Air connectors | 1/8" (BSP) for pipe 6 x 4 mm |
| Air pressure | From 6 bar (87 psi) to 8 bar (116 psi) |
| Cylinder material | AISI 304 (1.4301) |
| Gasket material | NBR |

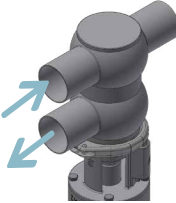



CERTIFICATIONS


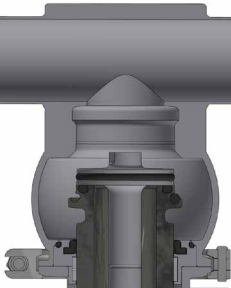





B93JPG - B93JPG REVERSE VALVE BODIES CONFIGURATION

| B935JPG VALVE BODIES CONFIGURATIONS | | | |
|---|---|---|--|
| 0° TL | 90° TL | 0° TT | 90° TT |
|  |  |  |  |

| CLOSED | OPEN |
|--|--|
|  |  |

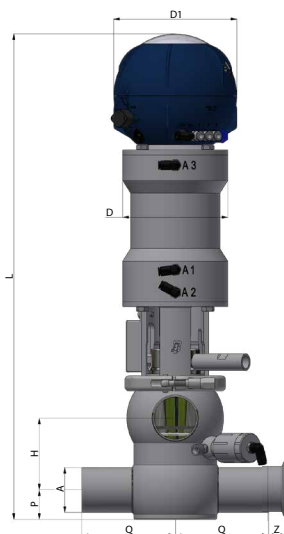
| B93JPG REVERSE VALVE BODIES CONFIGURATIONS | | | |
|---|---|---|--|
| 0° TLR | 90° TLR | 0° TTR | 90° TTR |
|  |  |  |  |

| CLOSED | OPEN |
|---|---|
|  |  |

| Legenda | |
|---|--|
|  | Recommended flow direction |
|  | B93JPG 1° - 2° - 3° - 4° examples of ends connections readings with different types and/or dimensions |
|  | B93JPG REVERSE 1° - 2° - 3° - 4° examples of ends connections readings with different types and/or dimensions |

B93JPG - B935JPG REVERSE DIMENSIONS

B93JPG/ B93JPG REVERSE



Legenda

| | |
|-----|------------|
| S/S | Welding |
| F/F | Male |
| - | On request |

| | S/S | | | | | | | F/F |
|-----|---------------|-----|-----|-----|-----|------|-----|-----|
| DN | A | D | D1 | H | L | P | Q | Z |
| 40 | 41x1.5 | 124 | 145 | 72 | 546 | 29 | 90 | 21 |
| 50 | 53x1.5 | 124 | 145 | 84 | 570 | 35 | 110 | 35 |
| 65 | 70x2 | 124 | 145 | 100 | 602 | 43 | 120 | 40 |
| 80 | 85x2 | 146 | 145 | 115 | 663 | 50.5 | 130 | 45 |
| 100 | 104x2 | 146 | 145 | 134 | 701 | 60 | 150 | 54 |

| | S/S | | | | | | |
|--------|-----------------|-----|-----|-------|-----|------|-----|
| OD | A | D | D1 | H | L | P | Q |
| 1"1/2 | 38.1x1.5 | 124 | 145 | 69.2 | 546 | 27.5 | 90 |
| 2" | 50.8x1.5 | 124 | 145 | 81.8 | 570 | 36 | 110 |
| 2" 1/2 | 63.5x1.5 | 124 | 145 | 94.6 | 597 | 40.5 | 120 |
| 3" | 76.1x2 | 146 | 145 | 106.2 | 655 | 47 | 130 |
| 4" | 101.6x2 | 146 | 145 | 131.6 | 701 | 62 | 150 |

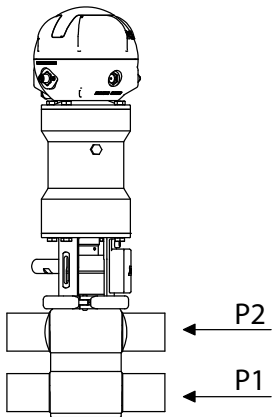
| | S/S | | | | | | | CLAMP |
|--------|-------------------|-----|-----|-------|-----|------|-----|-------|
| OD | A | D | D1 | H | L | P | Q | Z |
| 1"1/2 | 38.1x1.65 | 124 | 145 | 68.8 | 546 | 27.5 | 90 | 12.7 |
| 2" | 50.8x1.65 | 124 | 145 | 81.6 | 570 | 36 | 110 | 12.7 |
| 2" 1/2 | 63.5x1.65 | 124 | 145 | 94.4 | 597 | 40.5 | 120 | 12.7 |
| 3" | 76.2x1.65 | 146 | 145 | 107 | 655 | 46.5 | 130 | 12.7 |
| 4" | 101.6x2.11 | 146 | 145 | 131.6 | 701 | 62 | 150 | 15.8 |

B93JPG - B935JPG REVERSE

MAX. SEAL PRESSURES (BAR/PSI)

Legenda

cyl. Cylinder size



| DN | INCHES/OD | cyl. | P1 bar/psi | P2 bar/psi |
|-----|-----------|------|------------|------------|
| 40 | 1"1/2 | 93 | 5/72 | 10/145 |
| 50 | 2" | 93 | 5/72 | 10/145 |
| 65 | 2" 1/2 | 93 | 3.2/46 | 10/145 |
| 80 | 3" | 115 | 2.8/41 | 10/145 |
| 100 | 4" | 115 | 2/29 | 10/145 |

BZAW3PG DOUBLE SEAL VALVE OVERVIEW

360° Visibility

Efficient monitoring of valves status.

Certified safety

Available ATEX version, available for use in potentially explosive atmospheres.

Excellent hygiene and cleanability

<0.8 µm surface finish on parts in contact with the product.(0.4 µm on request)

Valve size from DN40 (OD 1,5") to DN100 (OD 4")

Giotto Top

Control unit made with quality and high resistance materials and observance of the highest safety standards

Strength

Body and plug made from solid bar

small auxiliary valve

Ensure an immediate leakage detection

Especially designed valve bodies allow product recovery with greater efficiency

CERTIFICATIONS



DESCRIPTION

BZAW3PG guarantees separation between two fluids and recovery of the product with PIG.

The special design of the shutter provides a separation chamber between the two seals.

This ensures that any product leaks flow out through the two auxiliary valves located on the separation chamber, avoiding any contact between the two fluids.

The lower body is specially designed to enable the smooth passage of the PIG while the upper body might have 1 or 2 horizontal ports.

WORKING PRINCIPLE



CLOSED VALVE

Double seal shutter ensures a safe separation between the upper and the lower valve body. When the valve is closed, sterilisation or cleaning is allowed between the seals, by two auxiliary valves. Those valves allow eventual leakage detection.



VALVE OPENING

In the opening phase of the double seal shutter, the two auxiliary valves closes automatically.

BZAW3PG

TECHNICAL DATA

BZAW3PG

VALVE STRUCTURE

| | | |
|---|---|--|
| Connections from DN40 to DN100 | DIN, SMS, IDF, BS (RJT), Clamp, Flange | Other connections on request |
| Material in contact with the product | AISI 316L (1.4404) | Other material on request |
| Material gaskets in contact with the product (FDA homologation) | EPDM, FKM, HNBR | Other material on request |
| Max product temperature (EPDM applications with air) | 140 °C (284 °F) | For other temperature, please ask Bardiani Valvole |
| Min product temperature (EPDM applications with air) | -10 °C (14 °F) | |
| Max product pressure | 10 bar (145 psi) | |
| Max working pressure | See table | |
| Finish on surfaces in contact with the product | Ra 0.8 µm (other types of surface finish on request). | |

PNEUMATIC ACTUATOR STRUCTURE

| | |
|-------------------|--|
| Air connectors | 1/8" (BSP) for pipe 6 x 4 mm |
| Air pressure | From 6 bar (87 psi) to 8 bar (116 psi) |
| Cylinder material | AISI 304 (1.4301) |
| Gasket material | NBR |

CERTIFICATIONS



| VALVE BODIES CONFIGURATIONS | | | |
|-----------------------------|-----------|----------|-----------|
| M8-0° TL | M8-90° TL | M8-0° TT | M8-90° TT |
| | | | |

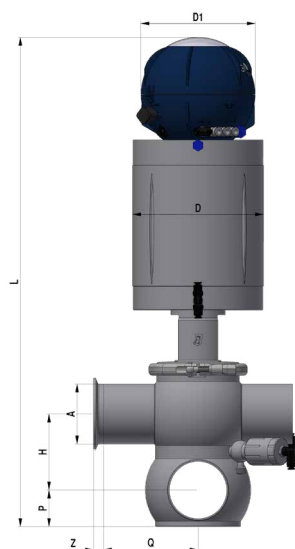
| CLOSED | OPEN |
|--------|------|
| | |

| Legenda | |
|---------|--|
| | Reccomended flow direction |
| | 1° - 2° - 3° - 4° examples of ends connections readings with different types and/or dimensions |

BZAW3PG

DIMENSIONS

BZAW3PG



Legenda

| | |
|-----|------------|
| F/F | Male |
| S/S | Welding |
| - | On request |

| | S/S | | | | | | | F/F |
|-----|--------|-------|-----|-------|-----|----|-----|-----|
| DN | A | D | D1 | H | L | P | Q | Z |
| 40 | 41x1.5 | 114.5 | 145 | 61.5 | 468 | 29 | 90 | 33 |
| 50 | 53x1.5 | 140 | 145 | 73.5 | 536 | 35 | 100 | 35 |
| 65 | 70x2 | 140 | 145 | 89.5 | 568 | 43 | 110 | 40 |
| 80 | 85x2 | 168 | 145 | 104.5 | 629 | 51 | 120 | 45 |
| 100 | 104x2 | 168 | 145 | 123.5 | 667 | 60 | 130 | 54 |

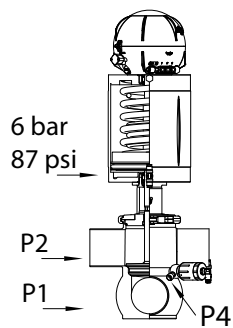
| | S/S | | | | | | |
|--------|----------|-------|-----|-------|-----|------|-----|
| OD | A | D | D1 | H | L | P | Q |
| 1" 1/2 | 38.1x1.5 | 114.5 | 145 | 58.7 | 468 | 32 | 90 |
| 2" | 50.8x1.5 | 140 | 145 | 71.3 | 536 | 35.5 | 100 |
| 2" 1/2 | 63.5x1.5 | 140 | 145 | 84.1 | 562 | 40 | 110 |
| 3" | 76.1x2 | 168 | 145 | 95.7 | 621 | 47.5 | 120 |
| 4" | 101.6x2 | 168 | 145 | 121.1 | 667 | 62 | 130 |

| | S/S | | | | | | | CLAMP |
|--------|------------|-------|-----|-------|-----|----|-----|-------|
| OD | A | D | D1 | H | L | P | Q | Z |
| 1" 1/2 | 38.1x1.65 | 114.5 | 145 | 58.3 | 468 | 32 | 90 | 12.7 |
| 2" | 50.8x1.65 | 140 | 145 | 71.1 | 536 | 36 | 100 | 12.7 |
| 2" 1/2 | 63.5x1.65 | 140 | 145 | 83.7 | 562 | 40 | 110 | 12.7 |
| 3" | 76.2x1.65 | 168 | 145 | 96.5 | 621 | 47 | 120 | 12.7 |
| 4" | 101.6x2.11 | 168 | 145 | 121.1 | 667 | 62 | 130 | 15.8 |

Other dimensions on request

Legenda

cyl. Cylinder size



| DN | INCHES/OD | cyl. | P1 bar/psi | P2 bar/psi |
|-----|-----------|------|------------|------------|
| 40 | 1" 1/2 | 108 | 10/145 | 10/145 |
| 50 | 2" | 134 | 10/145 | 10/145 |
| 65 | 2" 1/2 | 134 | 6.4/124 | 10/145 |
| 80 | 3" | 156 | 8.6/124 | 5.7/82 |
| 100 | 4" | 156 | 7.5/108 | 4.7/68 |

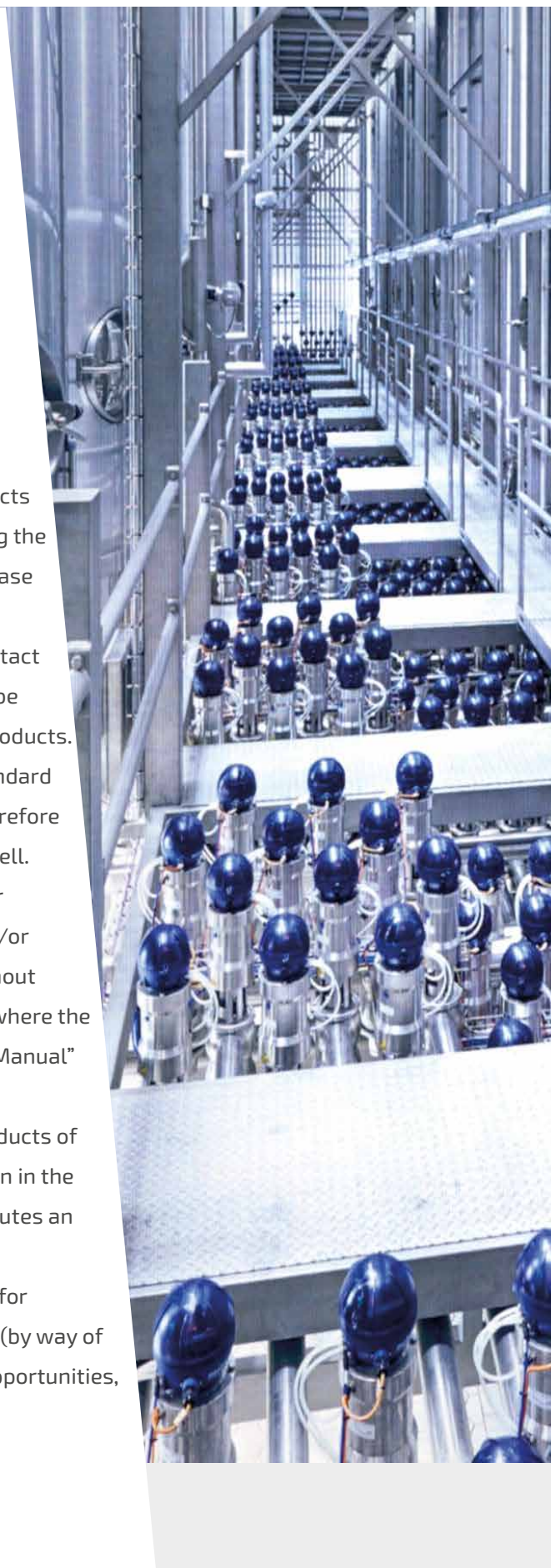
AUXILIARY VALVE CIRCUIT PRESSURE P4=6 BAR / 87 PSI

PIG STOPPER

Pig stopper is necessary to prevent the progress of the pig in the launching or departing station, and allow the cleaning; or to place the PIG in the correct position before the product change phases.



- Consultation of the “Instruction, Use and Maintenance Manual” is mandatory prior to the installation, use and maintenance of the products of all Products. All the information, indications, specifications, technical details provided herein are based on test data which the Manufacturer Bardiani Valvole S.p.A. holds to be reliable nevertheless the above is not deemed to be assumed as fully exhaustive inasmuch as not every possible use has been envisaged.
- All the illustrations and drawings provided are to be intended as indicative and therefore not binding, the illustrations being for presentation purposes only.
- It is the Buyer’s duty to assess the suitability of the Products for the use he intends to make of the same prior to placing the order as he/she will take the risks and accept liability in case of incorrect choice and use of the Products.
- The Manufacturer strongly recommends the Buyer to contact their sales team and request any information that might be needed in relation to the specifications and uses of the Products.
- The information provided in this manual refers to the standard products manufactured by Bardiani Valvole S.p.A. and therefore cannot be assumed to apply to customized products as well.
- Bardiani Valvole S.p.A. reserves the right to amend and/or integrate and/or update the data and/or information and/or technical details relative to Products at any time and without prior notice. Please visit the website www.bardiani.com, where the latest updated of the “Instruction, Use and Maintenance Manual” can be found”.
- The content and validity of the warranty covering the Products of Bardiani Valvole S.p.A are dealt with in the relevant section in the “Instruction, Use and Maintenance Manual” which constitutes an integral part of the Products themselves.
- Bardiani Valvole S.p.A., shall not in any way be held liable for immaterial, indirect and consequential damages, such as (by way of example only), damages or loss of business, contracts, opportunities, time, production, profits, goodwill, image etc..



BARDIANI CARE

Flexible made-to-measure services based on client needs. And it is here, in its capacity to build a made-to-measure post-sales service for each customer that Bardiani Valvole makes the difference.



Preventive maintenance

- Customer-specific production schedules
- Life cycle analysis and in-person valve maintenance
- Maintenance costs monitoring



Technical trainings

- Hands-on trainings
- On site or at customer plants
- Video tutorials



Guaranteeing parts availability

- Original spare parts
- Prompt deliveries
- Availability over time



Continual technical support

- Dedicated and made by experienced technicians
- Quick claims resolution

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Subject can change without notice