

1. ABOUT THIS DOCUMENTATION

This instruction and operating manual contains important information the user should observe to storage, mount and maintain Sitecna BV safely, for personal safety as well as prevention against damage to property.

2. RANGE AND RESPONSABILITIES OF PERSONNEL

Qualified personnel should be trained, instructed and authorized in operating and maintaining products and systems according to the safety regulations for electrical circuits, high pressures and hazardous atmosphere. They should be trained or instructed in maintenance and use of proper safety equipment according to the safety instructions. They should have good experience to identify risks and avoid potential hazards when working with these products and systems.

3. GENERAL SAFETY INSTRUCTIONS

To ensure safe operation of this product, the user must read all safety instructions described in this manual and observe safety information without any exception. Throughout this manual there are a number of HAZARD WARNINGS that must be read and adhered to in order to prevent possible personal injury and/or damage to equipment. Three signal work "DANGER", "WARNING" and "CAUTION" are used to indicate the severity of a hazard, and are preceded by the safety alert symbol.

Danger Denotes the most serious hazard and is used when serious injury or death WILL result from misuse or failure to follow specific instructions.

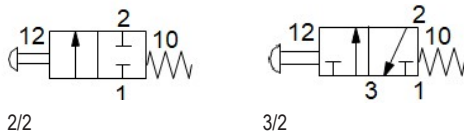
Warning Used when serious injury or death MAY result from misuse or failure to follow specific instructions.

Caution Used when injury or product/equipment damage may result from misuse or failure to follow specific instructions.

Caution It is the responsibility and duty of all personnel involved in the installation, operation and maintenance of the equipment on which this device is used, to fully understand the procedures by which hazards can be avoided.

The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

4. PNEUMATIC DIAGRAM



5. TECHNICAL FEATURES

- Medium: compressed air or inert gases, filtered, lubricated and not lubricated
- Port thread: 1/8", 1/4"
- Max supply pressure: 7 bar
- Materials: Body in SS316L
Spool in SS316L
Plug & spring in stainless steel
Gasket & seals in synthetic rubber

SEALS	TEMPERATURE		
	TRANSPORT	STORAGE	OPERATING
NBR	-20°C...+80°C	-20°C...+80°C	-20°C...+80°C
FKM	-25°C...+90°C	-25°C...+90°C	-25°C...+90°C
HNBR	-55°C...+90°C	-55°C...+90°C	-55°C...+90°C

6. TRANSPORTATION & STORAGE

The preferred storage location is a clean, dry and protected warehouse. If the components have to be stored outside, precautions should be taken to keep valves clean and dry. For storage temperatures, refer to the table in paragraph "TECHNICAL FEATURES".

To avoid contamination of impurities during the storage period, don't remove thread protection caps; remove them just before the installation phase.

7. INSTALLATION

Warning Before installing the valve, set and block the machine or equipment in a secure position; close the air shutoff valve and exhaust air from air lines and disconnect all electrical power.

- Caution** It is recommendable to check its conditions before the application
- A pressure reducer is necessary when air pressure is higher than max operating pressure.
- Install the pneumatic connections according to the pneumatic diagram enclosed.
- Caution** Gradually increase air supply to the max operating pressure.

8. MOUNTING

BV valve can be mounted in any position without affecting operation.

9. TESTING

- Note: BV is not a universal valve and works correctly only when the main pressure line is connected to port (1)
 - Inspect all connections and components for secure installation and proper alignment
 - Connect the supply air pressure to the inlet port (1)
 - Ensure that the BV valve is correctly installed and configured.
- Actuation with Push button:
 - When the button is pressed the spool (8+11**) and the valve (4**) shift position.
 - This action opens the main line pressure, allowing air to flow (Port 1 → Port 2*).
- Return to Default State:
 - When the button pressure drops to zero, the spool (8+11**) and the valve (4**) return to the original position due to the force of the springs (12+5**).
 - This action closes the main line pressure, and the springs reposition the shutter.
 - Moreover, this action puts ports 2-3 into communication (only for 3/2 config).
- Verification:
 - Repeat the test multiple times to ensure consistent operation.
 - Check for any leaks or irregularities in the valve's function.

* refers to "PNEUMATIC DIAGRAM"

** refers to "EXPLODED VIEW"

10. MAINTENANCE

A. Ordinary maintenance

Caution The BV should be periodically checked for proper functioning:

- Clean the BV from impurities and dirt;
- Visually check of the integrity of the body;
- Check that there aren't leakages;
- Check the correct functionality of the BV.

B. Troubleshooting

Issue	Possible Cause	Fixes
button doesn't move	damaged internal parts (spring, seal, spool, etc...)	Replace part with REPAIR KIT or contact SITECNA technical support for more information
leakages	Deterioration and/or damage of gasket	Replace part with REPAIR KIT or contact SITECNA technical support for more information

After replacing the EP redo "TESTING" phase

C. Disassembly

- Disassemble in general accordance with the item numbers on exploded view.

E. Assembly

- Lubricate O-ring and seals with alight coat of good quality (e.g. Polylub Gly®151 Kluber, Molykote 33®Med. Dupont™)
- Assemble the unit as shown on the exploded view.

11. DISPOSAL

All the series of products are realized with materials that are not dangerous for health. All components must be disposed depending on type of materials and followin local norms. All the main

parts of products are realized in stainless steel or copper free aluminium alloy (classified as metals).

11. MARKING ACCORDING TO 2014/34/UEAtex

II 2G Ex h IIC T6/T5 Gb X
II 2D Ex h IIIC T85°C/T100°C Db X

For using these equipment in potentially explosive atmospheres, it is recommended - for the installation and the maintenance operation - to use tools and instruments that can produce only a single spark (for instance: screwdrivers, spanners). Avoid use of tools that can produce sparks like disk saw or grinder.

Action must be taken to put to earth the units through a suitable connection, checking that all the metal components (fittings and pipe line) have to be equitable potential. Equipment have to be installed in the corresponding zone according to the marking.

NOTE: special conditions for safe use (X conditions)

X at the end of ATEX substitutes Tamb depending on used seals based on the following correspondence:
NBR=-20°C+80°C, FMK=-25°C+90°C, HNBR= -55°C+90°C

PART LIST

Pos.	Q.ty	Descrizione
1	1	BODY
2	1	SPRING PLUG
3	1	BUTTON PLUG
4	1	VALVE
5	1	SPRING
6	2	ORING
7	1	ORING
8	1	PUSH
9	1	PIN
10	1	O-RING
11	1	BUTTON
12	1	SPRING
13*	1	GASKET

* only in 3/2 version

LABELS

2/2

3/2

PRODUCT IDENTIFICATION

SIZE
02 = 1/8" NPT (only 3 ways)
04 = 1/4" NPT (only 2 ways)

WAYS
02 = 2 ways
03 = 3 ways

BV 04 00 00 02 SS HN 0

DIAPHRAGM & SEALS MATERIAL

- FK= FKM (WT-25° +90°C)
- NB= NBR (WT-20° +80°C)
- HN= HNBR (WT -60° +90°C)

Dichiarazione di conformità UE

In accordo con la Direttiva Europea 2014/34/UE

EU-Declaration of Conformity

In accordance with Directive 2014/34/EU

Noi, Sitecna Srl, dichiariamo che i seguenti prodotti / Sitecna Srl declares that the following equipment:

Product	mod.	Product	mod.	Product	mod.
Filter	F, F60, FP, TF	Control spool valve	DP	Silencer	SLHF, SLVP, SLSC
Regulator	R, RM	Poppet Valves	EP	Dust excluder	PV, PVSL
Filter Regulator	FR	Quick exhaust valve	VSR	Pressure gauge	MBSS, MBS6, MBSN
Back Pressure valve	BP	Flow regulator	RF	Flowmeter	FLGS
Switching valve	SV, S3	Overload protector	SCLP	Ball valve	VS
Volume Booster	VB	Vacuum pump	ST-VP	Push button valve	BV
Lock-up valve	LK				

Sono conformi alla normativa di armonizzazione dell'Unione / They comply with the Union harmonization legislation:

Direttiva 2014/34/UE ATEX	Direttiva 2014/34/UE del Parlamento europeo e del Consiglio, del 26 febbraio 2014, concernente l'armonizzazione delle legislazioni degli Stati membri relative agli apparecchi e sistemi di protezione destinati a essere utilizzati in atmosfera potenzialmente esplosiva (rifusione) Testo rilevante ai fini del SEE.
	Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres (recast) Text with EEA relevance.

Secondo le seguenti Norme di riferimento / As per following reference Normative Documents:

EN ISO 80079-36:2016	Atmosfere esplosive - Apparecchi non elettrici per atmosfere esplosive - Metodo di base e requisiti
	Explosive atmospheres - Non-Electrical equipment for explosive atmospheres - Basic method and requirements
EN ISO 80079-37:2016	Atmosfere esplosive - Apparecchi non elettrici per atmosfere esplosive - Tipo di protezione non elettrica per sicurezza costruttiva "c", per controllo della sorgente di accensione "b", per immersione in liquido "k"
	Explosive atmospheres - Non-Electrical equipment for explosive atmospheres - Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k"
N 1127-1:2019	Atmosfere esplosive - Prevenzione dell'esplosione e protezione contro l'esplosione - Concetti fondamentali e metodologia
	Explosive atmospheres - Explosion prevention and protection - Basic concepts and methodology

Ai sensi della Direttiva 2014/34/EU, i prodotti sopra indicati riportano la seguente marcatura / According to the Directive 2014/34/EU, above mentioned products reports the following marking:



II 2G Ex h IIC T6/T5 Gb X
II 2D Ex h IIIC T85°C/T100°C Db X

Inoltre, ai sensi della direttiva 2014/34/UE, i prodotti sopra menzionati sono oggetto, per gli aspetti relativi sia alla progettazione sia alla fabbricazione, al controllo interno di fabbricazione (Allegato VIII – Modulo A). Ref 557/Ex-Ab 3213/20 c/o N° 0035 TÜV Rheinland.

In conformity to Directive 2014/34/EU, the afore mentioned equipment, regarding their design and production, are object to internal manufacturing check (Attachment VIII – Module A). Ref 557/Ex-Ab 3213/20 c/o N° 0035 TÜV Rheinland.

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.

This declaration of conformity is issued under exclusive responsibility of the manufacturer.

Milan, 26/11/2025
 Davide Matteo De Corrado
 Managing Director

