

# **TECHNICAL DATA SHEET**

# Ball valve ELEPHANT BV32xP(4pc)-SP-3x-T-ISO-H DN10-100 63/40 bar stainless steel, three-way, standardbore, threaded with ISO flange and handle





+34 900 433 073, sales@valveelephant.com Carrer d'Aragó,264,3-1,08007 Barcelona, Spain

# 1. GENERAL PRODUCT INFORMATION

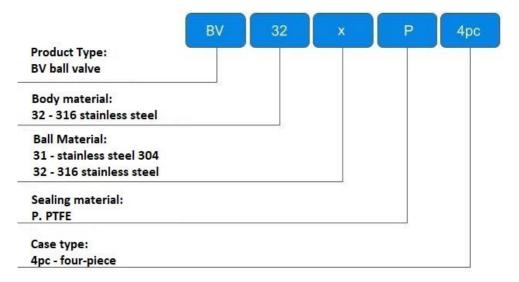
1.1. Product Name: Ball valve ELEPHANT BV32xP(4pc)-SP-3x-T-ISO-H DN10-100 63/40 bar stainless steel, three-way, standard-bore, threaded with ISO flange and handle. 1.2. Purpose: 3-way ball valve is used as a shut-off valve in heating, water supply systems, in steam, fuel and pneumatic systems with compressed air and neutral gases. Installation of valves of this series is possible in systems transporting liquid and gaseous media (water, oil, oils, steam, air, alcohols, glycol, etc.), non-aggressive to the materials of the valve. 1.3 Principle of operation: The working flow is closed by means of a locking element, which

is a ball with a through cylindrical hole. The ball is rotated around the axis by means of a handle mounted on the body. The main difference from a conventional coupling valve is the presence of three connection sockets with internal threads.





# 1.4. Deciphering of the designation:



	SP	3x	Т	ISO	Н
Passage type:			Sector Sector Sector		
SP - standard passage					
Type of crane:					
3WT - three-way T-type					
3WL - three-way L-type					
Type of connection:					
T-threaded					
Drive platform:					
ISO - ISO flange					
Type of management:					
H - handle					

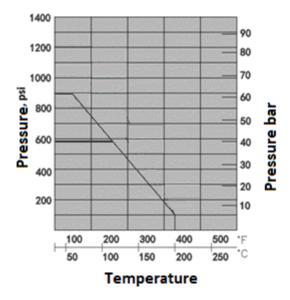


# 2. BASIC TECHNICAL DATA AND CHARACTERISTICS

# Table 1

Nominal diameter DN, mm	10-100
Nominal pressure PN, bar	DN10÷50-63
	DN65÷100 – 40
Working medium temperature t, °C	-20 to +200
Working medium	water, steam, petroleum products and other liquid or gaseous media neutral to valve materials
Connection to pipeline	threaded
Type of through section	standard bore
Ball valve tightness class	«A»
Control type	manual
Complement	electric or pneumatic actuator (ISO 5211-2001)
	pneumatic actuator (ISO 5211-2001)

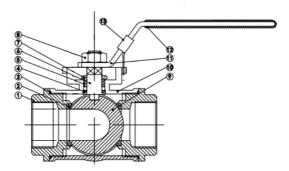
#### **3. TEMPERATURE-PRESSURE DIAGRAM»**





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# 4. BASIC MATERIALS

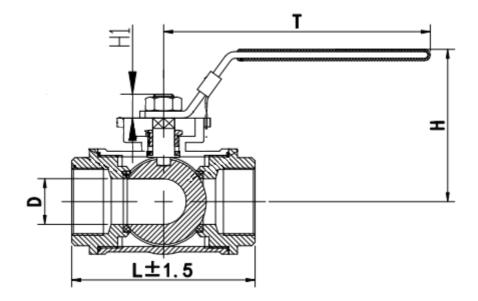


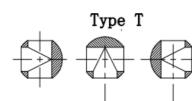
#### Table 2

№	Part name	Material	Quantity
1	Cover	SS316	3
2	Seat rings	PPL	4
3	Joint gasket	PTFE/RPTFE	3
4	Thrust washer	PTFE/RPTFE	1
5	Seal	PTFE/RPTFE	1
6	Stem	S304 / S316	1
7	Gland	SS304	1
8	Nut	SS304	2
9	Breech ball	S304 / S316	1
10	Body	SS316	1
11	Handle	\$304	1
12	Handle shell	PVC	1
13	Stopper	SS304	1

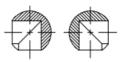


#### 5. WEIGHT AND DIMENSIONAL PARAMETERS









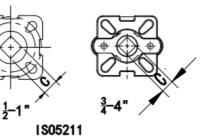




Table	3

Tuon											
	D	L±1.5	L1	H1	Н	Т	С	Torque	ISO	Weight	Weight
DN									5211	T-type	L-type
				mm				Nm	-	kg	kg
10	10	71	55	13	56	100	9	2	F03/F04	0,580	0,530
15	12	71	55	13	55	131	9	1,6	F03/F04	0,565	0,475
20	15	82	63	10	73	131	9	3,1	F03/F04	0,805	0,800
25	18	98	72	13	78,5	167	11	4,5	F04/F05	1,190	1,165
32	25	118	92	12	90	167	11	11,5	F04/F05	2,215	2,255
40	32	122	100	20	115	193	14	19	F05/F07	3,380	3,555
50	38	150	119	19	122	193	14	24	F05/F07	4,505	4,730
65	50	178	142	20	138	242	17	41	F07/F10	6,870	7,000
80	64	202	163	18	163	150	17	58	F07/F10	9,670	9,970
100	78	231	192	25	192	154	17	64	F07/F10	13,725	14,245



# 6. OPERATING INSTRUCTIONS

6.1. It is forbidden:

- Use ball valves as control valves;
- Allow the process medium to freeze inside the ball valve;
- Operate the product under conditions and at parameters that do not correspond to the nameplate values;
- Perform installation, dismantling, preventive maintenance work in the presence of working medium and pressure in the pipeline;
- Use ball valves instead of plugs when testing pipeline systems;
- Use valves as supports for pipelines;
- Use levers (gas wrenches, extensions) that increase the leverage of the handle to operate the valve.;
- Install the products on systems with media containing abrasive components.

6.2. To avoid water hammer in the pipeline to open and close the valve smoothly, without jerking.

6.3 It is not allowed to operate the valve with loosened handle fastening nut, as it may lead to stem neck breakage.

6.3 For preventive purposes, as well as to prevent the formation of karst deposits on the surface of the ball, it is required several times a year to perform 2-3 cycles"open-close".

6.4 If the ball valve is used with a working medium with a high content of mechanical impurities, the installation of additional filtering equipment at the inlet is mandatory.

6.5. During installation and operation of cranes, safety requirements must be met in accordance with the procedure established at the enterprise.

6.6. Maintenance of the valves in operation is reduced to periodic inspections. In this case, the stroke of the valve stem is checked until the valve is fully opened-closed, no leaks are detected.

# 7. INSTALLATION INSTRUCTION

7.1. Installation of threaded connecting parts of pipelines should be performed in accordance with the procedure established at the enterprise.

7.2. The ball valve may be installed on the pipeline section in any mounting position that provides ease of operation and access to the actuator.

7.3 Installation and dismantling of the product, as well as any repair or adjustment operations should be performed in the absence of pressure in the system.

7.4 Before installing the valve, the pipeline should be cleaned of dirt, sand, scale and any foreign objects.

7.5 To prevent contaminants (excess sealing material, paste, etc.) from getting into the internal cavities of the valve, the valve should be mounted in the fully open position.



7.6. As a sealant for threaded joints at the temperature of the working environment up to and including  $105^{\circ}$ C it is necessary to use a tape made of fluoroplastic sealing material (FUM) or linen strand impregnated with lead dryer or whitewash mixed with olive oil. As a sealant for threaded connections at the temperature of the working environment above  $105^{\circ}$ C, as well as for condensing lines should be used tape FUM or asbestos strand together with linen strand, impregnated with graphite, mixed with olive oil. FUM tape and linen strand shall be applied in an even layer along the thread and shall not protrude inside or outside the pipe.

7.7 When installing the valve, in order to prevent the formation of cracks and chips on the coupling ends of the valve, deformation of the body of the valve and depressurization of the connection of half shells, it is recommended to use standard wrenches. During installation, it is necessary to tighten the valve by the closest to the pipe part of the valve body on which it is mounted.

7.8 The ball valve should not experience loads from the pipeline (bending, compression, tension, torsion, warping, vibration, misalignment of spigots). If necessary, supports or compensators should be provided to reduce the load on the valve from the pipeline.

7.9. After installation, check that the crane is operational

by turning the handle, while moving parts should move smoothly, without jerks and jams. Tightness tests of connections are carried out in accordance with the procedure established at the enterprise.



# 8. УСЛОВИЯ ТРАНСПОРТИРОВКИ И ХРАНЕНИЯ

8.1. Transportation of ball valves is carried out in accordance with the procedure established at the enterprise.

8.2. Storage should be carried out in the factory packaging in accordance with the procedure established at the enterprise.

8.3. At shipment to the customer the valves are not subjected to preservation, as the materials used in their manufacture are weatherproof and have a protective coating.

8.4 During storage, transportation ball valves do not harm the environment and human health.

# 9. UTILIZATION

9.1. The product is disposed of in accordance with the procedure established at the enterprise (remelting, burial, resale).



# **10. WARRANTY OBLIGATIONS**

10.1. Warranty period - 12 months from the date of commissioning, but not more than 18 months from the date of sale.

10.2. The warranty applies to equipment installed and used in accordance with the installation instructions and product specifications described in this data sheet.

10.3. The manufacturer guarantees compliance of the product with safety requirements, provided that the consumer complies with the rules of transport, storage, installation and operation.

10.4. The warranty covers all defects caused by the fault of the manufacturer.

10.5. The warranty does not apply:

- parts and materials of the product subject to wear and tear;
- for cases of damage caused by:
  - modifications to the original design of the product;
  - violation of general installation recommendations;
  - faults caused by improper maintenance and storage; improper operation and use of the equipment.

# **11. WARRANTY TERMS**

11.1. Claims to the quality of the goods may be made during the warranty period.

11.2. Defective products are repaired or exchanged for new ones free of charge during the warranty period. ELEPHANT decides whether to replace or repair the product. The replaced product or its parts resulting from the repair shall become the property of 'ELEPHANT'.

11.3. Costs related to dismantling, installation and transport of the defective product during the warranty period shall not be reimbursed to the Buyer.

11.4. If the claim is unfounded, the Buyer shall pay the costs of diagnostics and expertise of the product.

11.5. Products are accepted for warranty repair (as well as for return) fully assembled.



#### WARRANTY CARD №

N⁰	Product Name	Packs

Name and address of the trading organisation

Date of sale	Seller's signature	
Date of sale	 Serier s signature	

Stamp or seal of the trading organisation

Acceptance stamp

Warranty period - 12 months from the date of commissioning, but not more than 18 months from the date of sale.

For warranty repairs, complaints and product quality claims, please contact <u>ELEPHANT at:</u> Carrer d'Aragó,264,3-1,08007 Barcelona, Spain\_E-mail address: sales@valveelephant.com.

When making a complaint about the quality of goods, the buyer shall present the following documents:

1. A free-form application, which shall specify:

- name of the organisation or full name of the buyer, actual address, contact telephone numbers;
- name and address of the organisation that carried out the installation;
- basic parameters of the system in which the product was used;
- a brief description of the defect.
- 2. Document confirming the purchase of the product (delivery note, receipt)..
- 3. Act of hydraulic test of the system in which the product was installed.
- 4. This completed warranty card.

A note on the return or exchange of goods \_\_\_\_\_

Date: «\_\_\_\_»\_\_\_\_\_202\_\_\_r. Caption \_\_\_\_\_\_

