



# Ball Valve TECVAL

## Typ VB-12



### 2-Way High Pressure Ball Valve (FxF) Up to 210 bar (3000 PSI)

With a smooth and safe movement, TECVAL VB-12 ball valve is designed to work with liquids or gases under either high pressure or moderate vacuum service. To be used in numerous applications, they are manufactured in several sizes, connections and alloys.



#### Features

- Smooth operating.
- No ejectable stem design.
- No maintenance required.
- Anti-leak stem with double o-ring seal.
- 100% tested.

#### Options

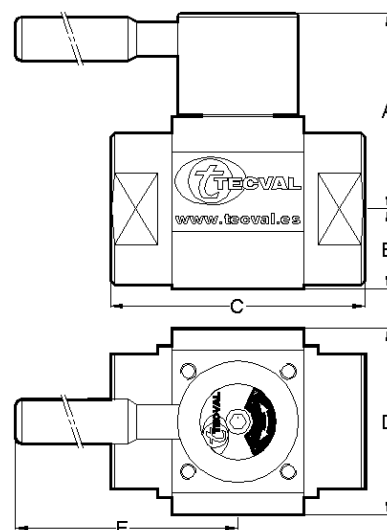
- PEEK seats for high pressures, up to 1" size. **I**
- Degreased for oxygen service. **D**
- Automation through electrical **A** or pneumatic actuator **H**
- AISI-316 Handle. **M**
- Two-Ferrule compression end connections.
- Prepared for a quick automation (ISO 5211). **T**
- Male-Female **C** and Male-Male **J** end connections.

#### Technical data

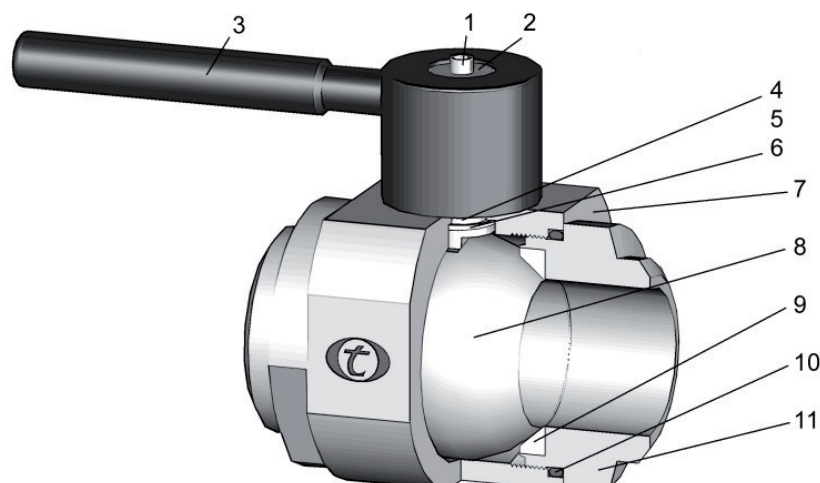
Max. Pressure	Standard PTFE Seats 105 bar (1500 PSI) Up to 1" Optional Special Seats 210 bar (3000 PSI)							
Temperatures	-20°C/200°C (-4°F/392°F)							
Dimensions	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	50	50	57	57	60	76	98	98
B	14	14	17	23	26	31	39	47
C (BSP/NPT/SW)	50	50	62.5	74	90	95	118	118
C (BW)	68	68	81	90	100	120	148	148
D	25	25	44	50	54	74	92	100
E	60	60	105	105	105	135	190	190
Orifice Size	6	8	12	15	20	25	32	40
Maximum Cv	3	5	9	18	29	40	85	120

#### Order codes

BSP	3800	3802	3804	3806	3808	3814	3810	3812
NPT	3801	3803	3805	3807	3809	3815	3811	3813
SW	3850	3852	3854	3856	3858	3864	3860	3862
BW	3851	3853	3855	3857	3859	3865	3861	3863
Compression	3870	3871	3872	3873	3874	3875	3876	3877



\* Dimensions in mm



## Materials

Nº	Part	Stainless Steel AISI-316 <b>A4</b>	Special Alloys
1	Set screw	AISI-304 (DIN1.4301)	AISI-316 (DIN1.4401)
2	Id. plate	PVC	PVC
3	Handle	Black painted aluminium	AISI-316 (DIN1.4401)
4	Stem	AISI-316 (DIN1.4401)	Exotic alloy
5	Stem o-ring	FKM	FKM
6	Stem bearing	Delrin	Delrin
7	Body	AISI-316 (DIN1.4401)	Exotic alloy
8	Ball	AISI-316 (DIN1.4401)	Exotic alloy
9	Seat	P.T.F.E.	P.T.F.E.
10	O-ring	FKM	FKM
11	End connection	AISI-316 (DIN1.4401)	Exotic alloy

## Special alloys

Among the wide range of alloys existing, TECVAL has selected those considered by our customers as most suitable, which we stock to ensure a quick and effective supply. Whether you do not find the required alloy or need further information about our exotic alloys valves and fittings, please address your inquiry to our Technical Department.

AISI-316Ti (1.4571) **A6**, AISI-904L (1.4539) **A9**, Duplex (1.4462) **AD**, SuperDuplex (1.4410/1.4501) **AS**, 254-SMO (1.4547) **AV**, Titanium Gr.2 (1.7864) **TI**, Hastelloy C-276 (2.4819) **HA**

## Ordering information

References are formed by three parts:

Valve Code	Option/s	Material
Look for it in the order codes chart on the previous page.	-If required, add the code/s from the options section on the previous page (in alphabetical order)	-Look for the code on the materials chart.

An example of valve and two options:

Ball valve VB-12 1/2"NPT with PEEK seats and pneumatic actuator of AISI-316:

**3805 HI A4** The reference required to place the order is **3805HIA4**

## Actuators

Upon request, ball valves VB-12 can be delivered with pneumatic actuators, either double acting or spring return. The actuators can be worked by standardised or bottled air.

Electrical actuators of 24V, 115V and 230V can also be assembled.

All actuators can include limit switches, electrovalves and an emergency wheel, and are assembled and tested with the valve.

## Tests

According to API STANDARD 598, each valve is tested with nitrogen at 100 bar for 15 sec to check the leakage in the seat and packing. Upon request, the corresponding materials and test certificates can be delivered with the valve.

## Packaging

All TECVAL valves are supplied packed in individual polyethylene airtight bags, which include the general features of the valve. End screw connections are protected with polyethylene caps. Everything is 100% recyclable.