

# TGV-15

## FULL BORE BALL VALVE / THREE PIECE

### GENERAL FEATURES

In ball valves, the main element is a sphere with a hole in the center. A 90° rotation of this sphere moves from the fully open to the fully closed position. Ball valves are primarily used in applications requiring frequent opening and closing or quick opening and closing.

Advantages: Low pressure loss, easy opening and closing, good sealing, lightweight, and compact size.

Sealing: Consists of two stages: sealing of the sphere and sealing of the stem.

Ayvaz TGV-15 Three Piece Full-Bore Ball Valves are important control elements that provide opening, closing, and flow control. Due to their structure and fluid passage patterns, ball valves have the least pressure loss among valves. In particular, Ayvaz TGV-15 Full-Bore Ball Valves provide an "equivalent pressure loss" to the pressure loss occurring in a pipe of the same diameter.

It has a top flange conforming to ISO 5211 and is compatible with actuator assemblies.

#### Material

Body: GG.25 Cast Iron

Connection: Flanged

Nominal Diameter: DN15 (1/2") – DN200 (8")

Pressure: Up to a maximum of 16 bar.

Temp. Range: From -10 °C to 180

°C, depending on the material composition.

#### Applications

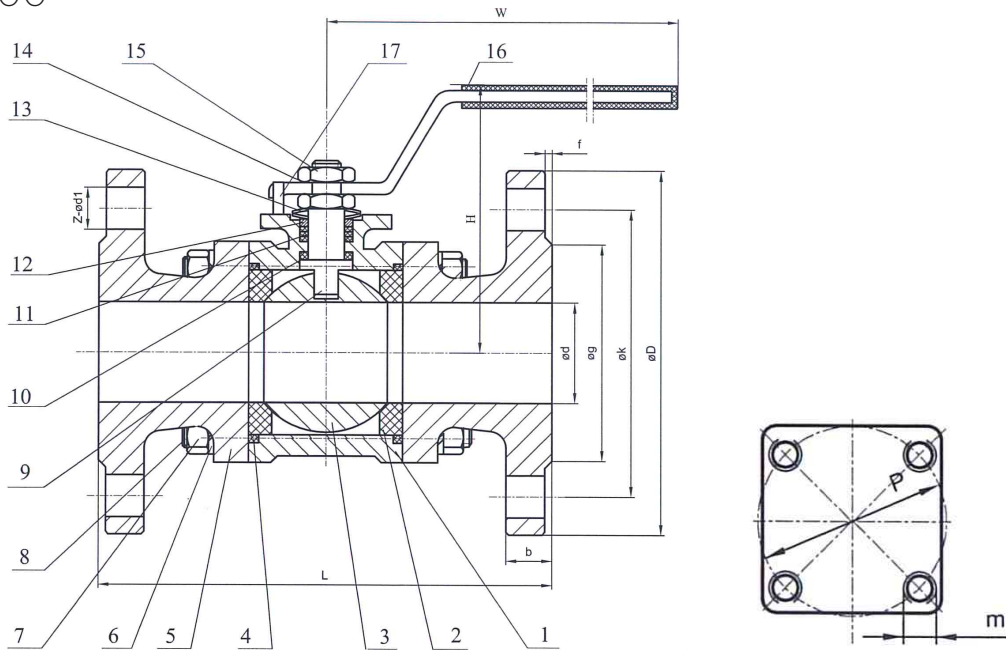
- Heating and cooling lines
- Food processing plants
- Shipbuilding
- Paper mills

ON/OFF TORQUE VALUE (Nm)

DN	15	20	25	32	40	50	65	80	100	125	150	200
Full Bore	5	7	11	14	17	25	45	80	120	210	400	770

# TGV-15 FULL BORE BALL VALVE / THREE PIECE

DN15-DN100

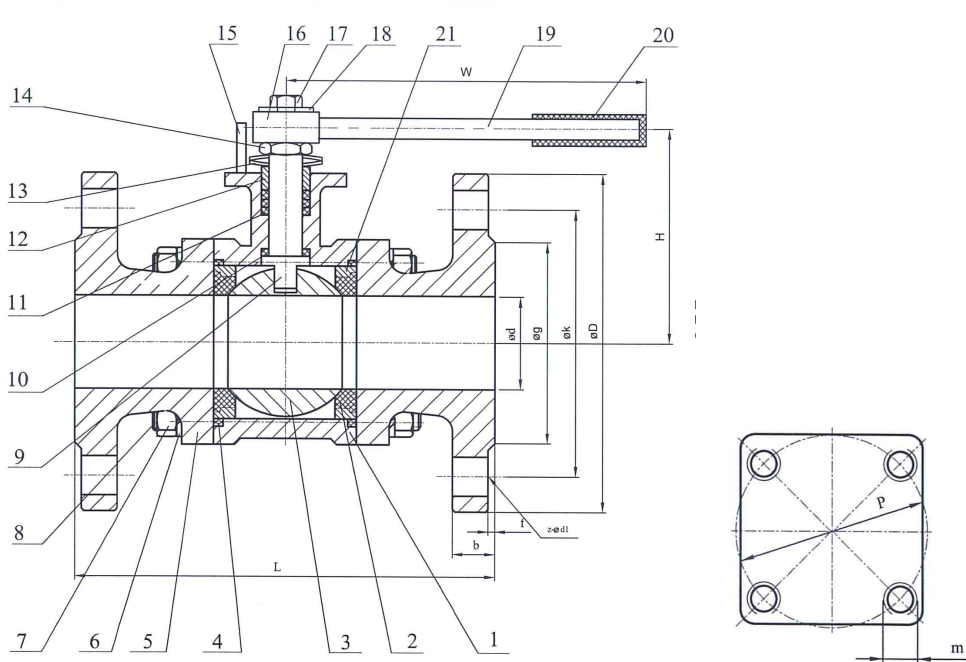


PART LIST		
NO	PART	MATERIAL
1	Body	GGG-40.3 Ductile Iron
2	Ball Seal	R-PTFE (%15)
3	Ball	Stainless Steel
4	Body Gasket	PTFE
5	Cover	GG25
6	Washer	Carbon Steel
7	Nut	Carbon Steel
8	Bolt	Carbon Steel
9	Shaft	Stainless Steel
10	Teflon Seal	PTFE
11	Sealing Gasket	PTFE
12	Sealing Gasket	Carbon Steel
13	Spring Washer	SS301
14	Arm	Carbon Steel
15	Nut	Carbon Steel
16	Arm Cover	Plastic
17	Pin	Carbon Steel

TGV-15 DIMENSIONS (mm)												
DN	d	D	L	H	W	P	m	g	k	f	b	z-Ød1
15	14	95	130	82.5	166	42	M5	45	65	2	14	4-Ø14
20	19	105	150	88.5	166	42	M5	58	75	2	16	4-Ø14
25	24	115	160	93.5	166	42	M5	68	85	2	16	4-Ø14
32	30	140	180	97.9	230	50	M6	78	100	2	18	4-Ø19
40	38	150	200	110.4	230	50	M6	88	110	3	18	4-Ø19
50	47	165	230	117.1	230	70	M8	102	125	3	20	4-Ø19
65	62	185	290	138.9	400	70	M8	122	145	3	20	4-Ø19
80	76	200	310	150.4	400	102	M10	138	160	3	22	8-Ø19
100	95	220	350	167.7	400	102	M10	158	180	3	24	8-Ø19

# TGV-15 FULL BORE BALL VALVE / THREE PIECE

DN125-DN200



PART LIST		
NO	PART	MATERIAL
1	Body	GG.25 Ductile Iron
2	Ball Seal	R-PTFE (%15)
3	Ball	SS304
4	Body Gasket	PTFE
5	Cover	GG25
6	Washer	Carbon Steel
7	Nut	Carbon Steel
8	Bolt	Carbon Steel
9	Shaft	Stainless Steel
10	Teflon Seal	PTFE
11	Sealing Gasket	PTFE
12	Sealing Gasket	Carbon Steel
13	Spring Washer	SS301
14	Nut	Carbon Steel
15	Pin	Carbon Steel
16	Arm Seat	Carbon Steel
17	Nut	Carbon Steel
18	Washer	Carbon Steel
19	Arm	Carbon Steel
20	Arm Cover	Plastic
21	Body Seat	Carbon Steelk

TGV-15 DIMENSIONS (mm)												
DN	d	D	L	W	H	P	m	b	f	g	k	z-Ød1
125	119	250	400	640	220	125	M12	25	3	188	210	4-Ø14
150	142	285	450	740	230	125	M12	25	3	212	240	4-Ø14
200	190	340	550	840	280	125	M12	25	3	268	295	4-Ø14

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## 3D APPLICATION EXAMPLE

