

Pressure-Temperature Ratings

The pressure-temperature ratings of ball valves are determined, not only by valve shell materials, but more essentially by sealing materials, used for ball seats, gland packing and gaskets.

Sealing materials may be high molecule, or rubber, but the choice is limited by the characteristics of the service fluid, working temperatures, working pressures, velocity of fluid, and operational frequency of valves.

As it is very difficult to predetermine the exact pressure-temperature rating for all kind of fluids under all imaginable conditions, we have prepared general rating charts for non-shock

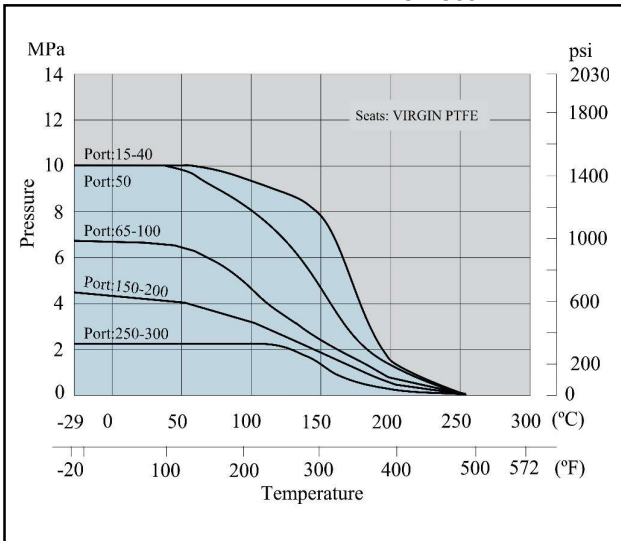
fluid service here, based on our past experiences both in the field and in our laboratory.

In case of extraordinary service conditions as mentioned below, contact KITZ Corporation of Europe or its distributors for technical advice:

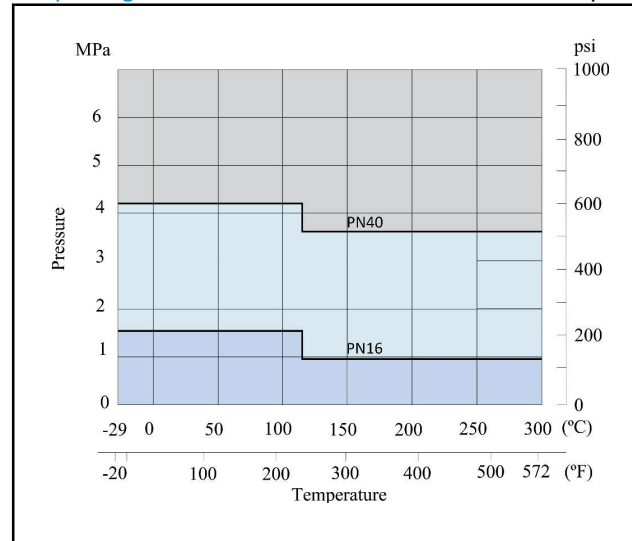
1. Valves shall be left fully closed for a long period of time under high temperature or high differential pressure.
2. Valves shall be frequently operated under high temperature or high differential pressure.
3. Frequent change of line pressure or temperature.

Virgin PTFE is the standard seat material for F14 and F14D series KITZ ball valves. Specify PTFE + Graphite or PTFE + Stainless Steel , PTFE + Glass Filled, etc. when required.

F14 PN10 - 16 DN 15 ~ 200
F14D PN10 - 16 - 25 - 40 DN 15 ~ 300



Body Rating: Pressure resistance limitation for valve body



F14 - Class PN16 Cast Iron Ball Valves

Full port, Split body, Side entry design

Features

- Antistatic device
- Blowout-proof stem
- High performance **PTFE** ball seats
- Standards: **Design:** EN ISO 17292 **Thickness:** ISO 7121
Flanges drilled: EN 1092 **Flanges surfaces:** EN 1092

Leak test: BS EN 12266-1 Class A & DIN 3230

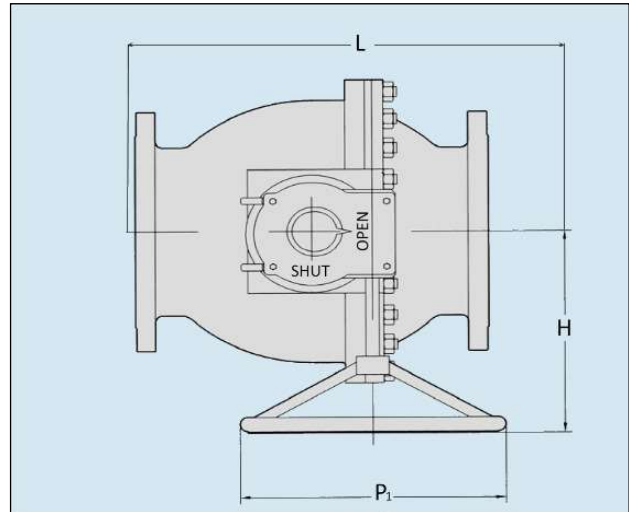
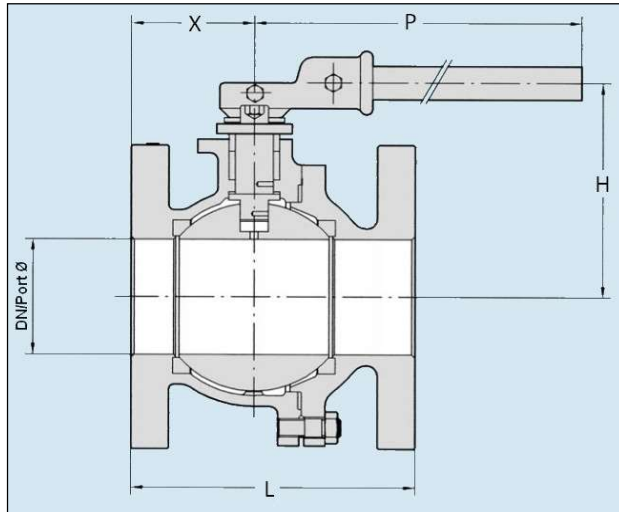
Lengths : Distance between flanges as per EN 558-1

DN ≤ 100 basic serie 14

DN ≥ 125 basic serie 15

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Page 5 for Construction and Materials

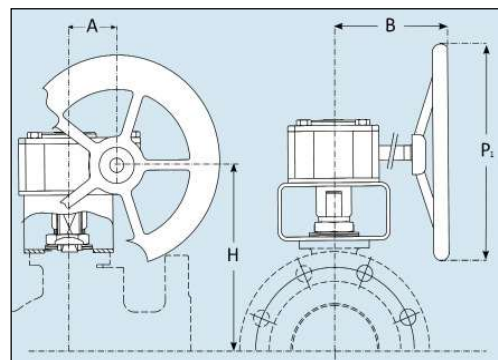


Features of PN16 F14

Un: mm

Valve Size DN	Port	L	X	P	H	Cv (m³/h)	Torque PN16 (N.m)	Weight (Kg)
15	12.5	115	52	150	85	17	5	1,8
20	19	120	55	150	90	39	6	2,8
25	25	125	58	150	104	63	8	3,7
32	32	130	58	200	115	104	15	6,1
40	38	140	60	200	120	150	20	7,5
50	51	150	60	250	132	254	25	10,9
65	65	170	75	250	144	381	40	15
80	76	180	78	250	154	971	60	20
100	102	190	95	500	212	1560	120	29,7
125	111	325	162	500	214	2173	150	46,5
150	144	350	175	750	238	4046	250	73
200	190	400	200	-	^{Gear operation}	8787	500	146 ⁽¹⁾

1 Cv = 1,16 Kv



Valve Operator

Dn 15 ~ 150 : lever operation

Dn 100 ~ 150 : optional gear box

Dn 200 : gear box or lever (optional)

⁽¹⁾ Gear box included

Gear Operation

Un: mm

Class	PN16	Gear Operator			
		H	P ₁	B	A
Valve Size (Dn)	100	-	300	282	71
	125	-	300	282	71
	150	-	300	282	71
	200	303	400	340	86

Worm gear operators may be mounted on KITZ ball valves at your option for the smoothest valve operation. Electric or pneumatic actuators are also optionally available. Contact KITZ distributors for appropriate choice and sizing of valve actuators.

Construction and Materials

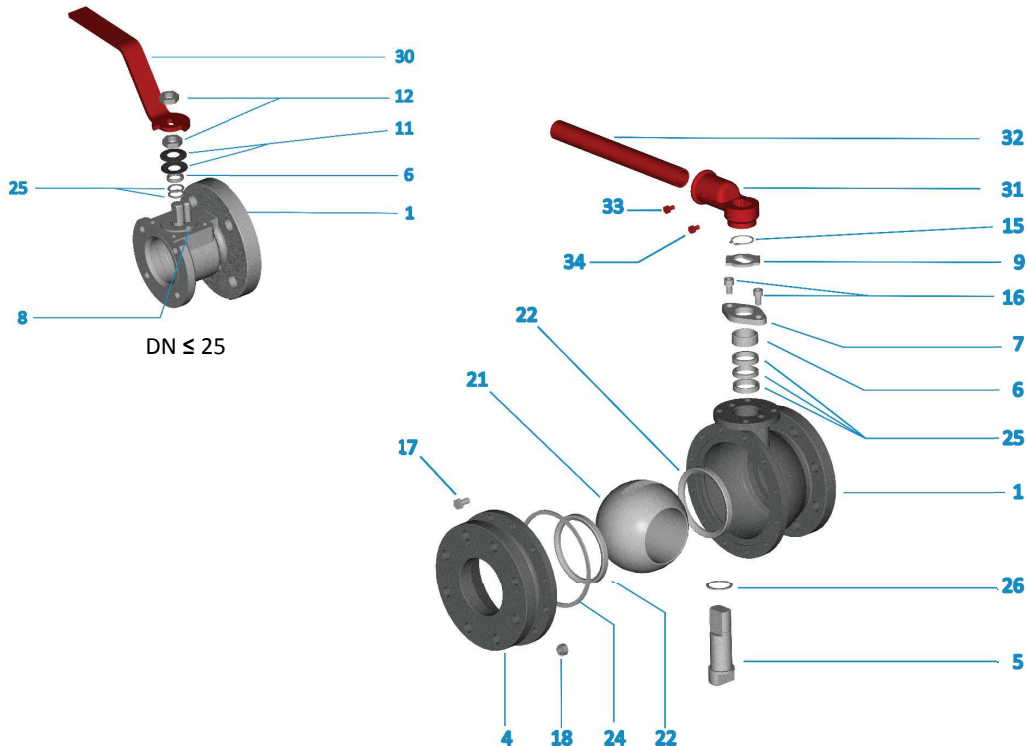
No.	Parts	Standard
		PN 16
1	Body	GG25
4	Body Connector	GG25
5	Antistatic Stem* ¹	ASTM A479 Type 316 / 410
6	Gland Ring	ASTM A479 Type 316
7	Gland Flange	Steel
8	Stop Pin	Steel
9	Stop Plate	Steel zinc plated
11	Gland Washer	Blue Steel
12	Nut* ⁵	DIN 267/3-8 blued
15	Elastic Ring	Steel
16	Gland bolt	Steel
17	Bolt - Stud Bolt* ⁵	DIN 267/3/4 C8.8/8 blued / zinc plated
18	Nut* ⁵	DIN 267/3/4 C8.8/8 blued / zinc plated
21	Ball* ²	ASTMA479 Type 316 / 1.4408 / CA15
22	Ball Seat	PTFE
24	Body Seal* ⁴	PTFE / 316L+Flexite®
25	Gland Packing* ³	PTFE+C+Graphite / PTFE
26	Stem Seal* ³	PTFE+C+Graphite / PTFE
30	Handle	Steel coated
31	Handle head	GGG40
32	Handle bar	GGG40
33	Handle bar bolt	Stainless Steel
34	Handle head bolt	Stainless Steel

■ Standard material configuration can be applied to sour service.

- *1 DN ≤ 50 : ASTM A479 Type 316
DN > 50 : ASTM A479 Type 410
- *2 DN ≤ 32 : ASTM A479 Type 316
32 < DN ≤ 50 : DIN 1.4408
DN > 50 : ASTM A217/A743 Gr. CA15
DIN 1.4408 (Optional)
- *3 DN ≤ 25 : PTFE+C+Graphite
DN > 25 : PTFE
- *4 DN ≤ 25 : PTFE
DN > 25 : 316L+ Flexite®
- *5 DN < 40 : DIN 267/3 C8.8 blued
DN = 40 : DIN 267/3/4 C8.8/8 zinc plated
DN > 40 : DIN 267/3 C8.8 blued

Valve finish : phosphate and oil dipped.

Operation group: DN ≤ 150 : by lever. (100~150 option: gear box)
DN = 200 : by gear box or with lever (Optional)



All part numbers are corresponding with those shown in valve assembly drawings.