

## K-BALL FIG V72/V74 WAFER STYLE BALL VALVES

Wafer style ball valves, full bore, providing 90° shut-off with minimum weight and space requirements



### FEATURES

- For assembly as wafer units within flanged piping systems to PN 16.
- Ball profile contained within body dimensions, in both open and shut positions.
- Suitable for flow in either direction.
- Tested to ISO 5208, with Category A tightness.
- Flanged holes tapped to PN 16.
- 3-stage stem seal arrangement, TA Luft approved.
- 90° lever operation with travel stops.
- Suitable for vacuum service.
- Pressure/temperature limits according to seat material (see page 4).
- Fire tested and anti-static (model V74).

### APPLICATION

For use in flanged pipe systems, where space and weight are major considerations. Particularly recommended for use in transportation markets - for instance, on tankers, containers, etc.

### TECHNICAL DATA

Size range: DN15 - 150, 1/2" - 6"  
 Maximum pressure: PN16  
 Temperature range: -20°C to +160°C  
 Maximum vacuum: 10<sup>-3</sup> torr  
 Seat material: PTFE, Carbon Filled PTFE (Fire tested version), Glass Filled PTFE (ANSI 300 and PN40 models)

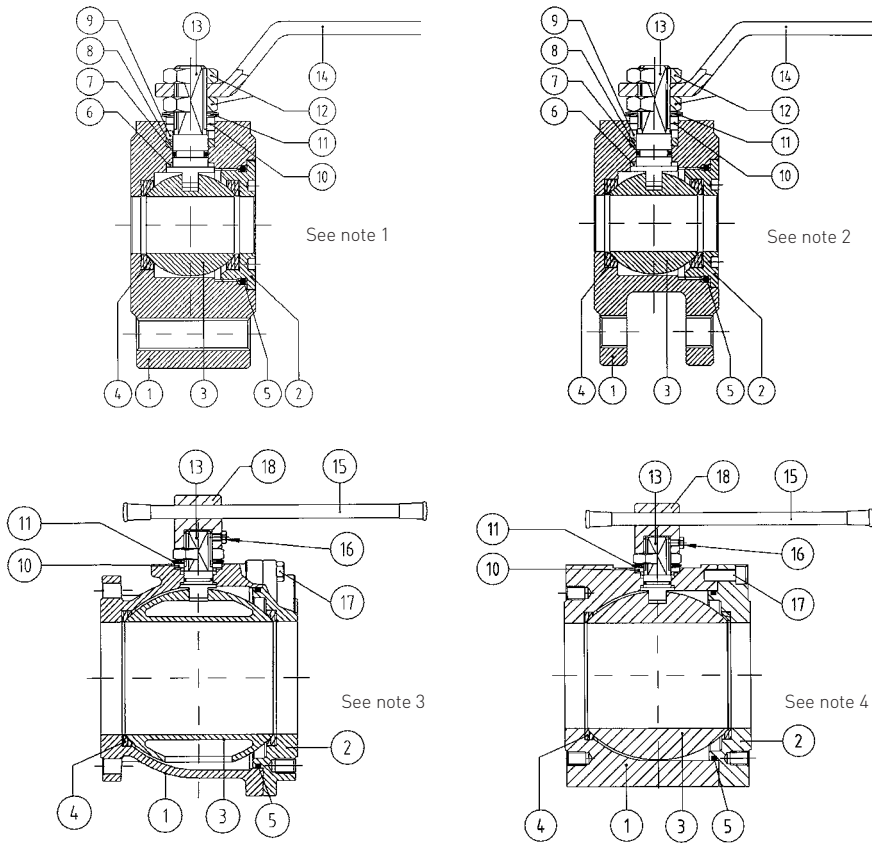
### OPTIONS

- Flange drilling: size DN80 drilled PN10
- Jacketed body design
- Cavity filler seats
- PN25/40 and ANSI 150, 300
- Locking handle device



# K-BALL FIG V72/V74 WAFER STYLE BALL VALVES

## MATERIALS OF CONSTRUCTION



### NOTES

1. DN 15 - 32 (Stainless steel models)  
DN 15 - 100 (Carbon steel models)
2. DN 40 - 100 (Stainless steel models only)
3. DN 125-150 (Stainless steel models)
4. DN 125/150 (Carbon steel models)

### MATERIALS OF CONSTRUCTION

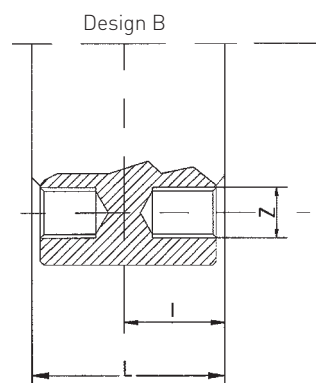
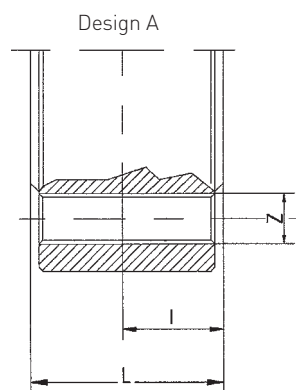
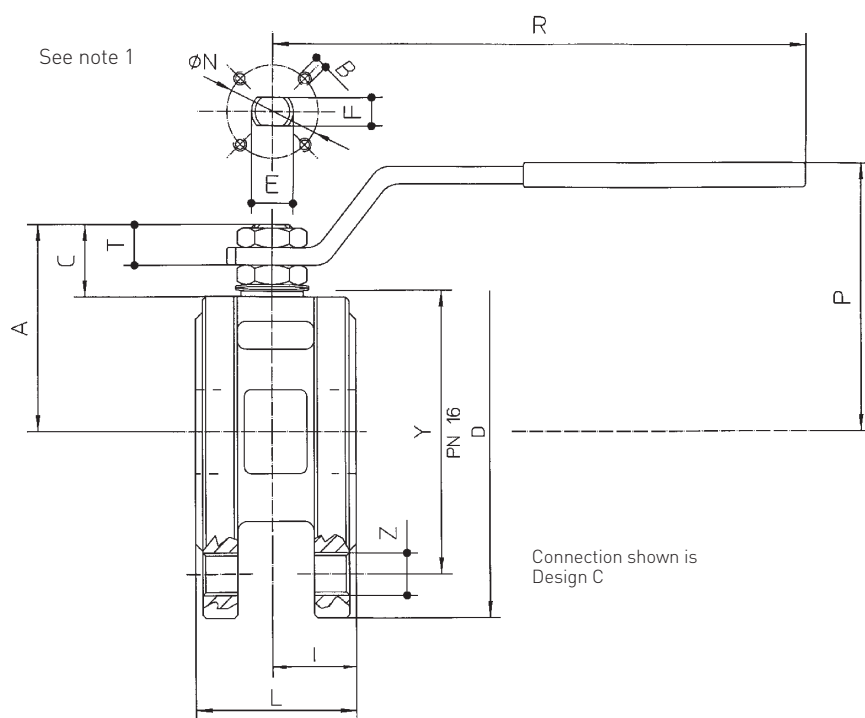
Pos.	Part name	Materials		N°P.
		Stainless steel models	Carbon steel models	
1	Body	AISI 316/CF8M <sup>[1]</sup>	ASTM A105 <sup>[2]</sup>	1
2	End connection	AISI 316	ASTM A105	1
3	Ball	AISI 316/CF8M <sup>[3]</sup>	AISI 304	1
4	Seat		PTFE	2
5	Body seal		PTFE	1
6	Stem seal		PTFE	1
7	'O' ring		PTFE	1
8	Packing		PTFE	1
9	Packing gland	AISI 12L14 (Ni PLated)		1
10	End stop	AISI 12L14 (Ni PLated)		2/1
11	Spring washer		UNI 3545	2
12	Nut		UNI 5771	2
13	Stem		AISI 316 <sup>[4]</sup>	1
14	Handle		Steel (Ni plated) / PVC Sleeve	1
15	Handle (DN 150)		Burnished Steel	1
16	Screw		Steel	1
17	Screw		Steel	8-12
18	T-Bar adaptor		GG 25 UNI 5007	1

### NOTES

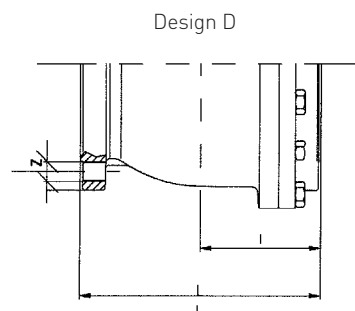
1. Stainless steel models  
Body material is from bar stock for DN 15-32 Size DN 40 and above use a cast body
2. Carbon steel models  
Body material is from bar stock for DN 15-100 Size DN 125/150 use a cast body
3. Ball material (Stainless steel models)  
DN 15-100      AISI 316  
DN 125/150    CF8M
4. Stem material (Carbon steel models)  
DN 15-150     AISI 304

# K-BALL FIG V72/V74 WAFER STYLE BALL VALVES

## VALVE DIMENSIONS



Connection shown is Design C



### NOTES

- Diagram is representative only. The body design varies by size as shown on the previous page.
- Connection details vary by model as shown below.

#### Design A

DN15 - DN32 (Carbon and stainless steel models)

#### Design B

DN40 - DN150 (Carbon steel models)

#### Design C

DN40 - DN100 (Stainless steel models)

#### Design D

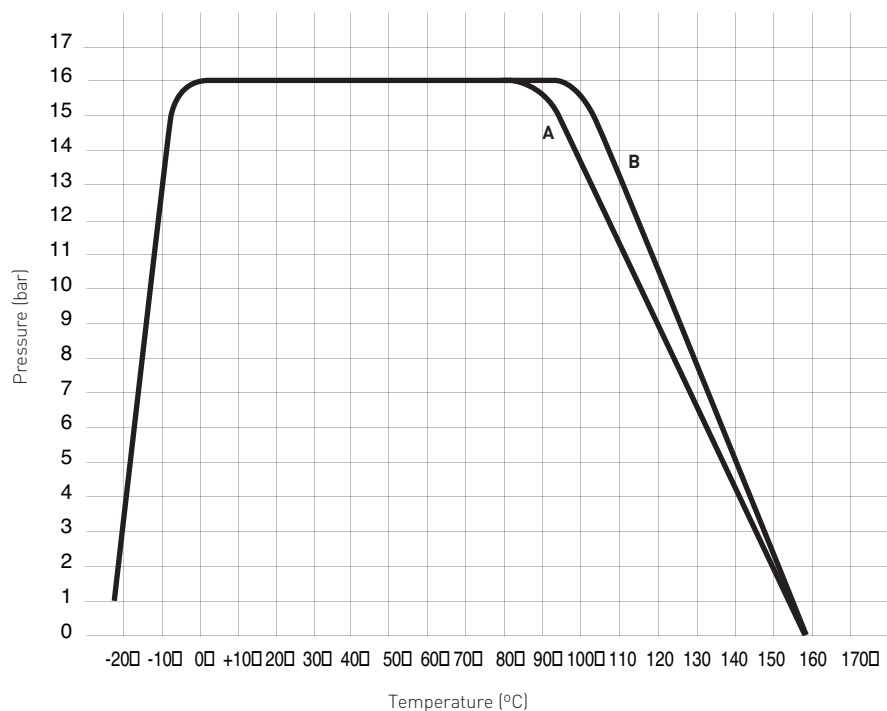
DN125 - DN150 (Stainless steel models)

### DIMENSIONS

DN	NPS	D	Y	Z	I	L	R	P	A	C	T	E	F	N	B	K <sub>v</sub>	C <sub>v</sub>	Kg
15	½	90	65	4 x M12	19	35	131.5	64.5	47	15.5	9	10	7	32	4 x M5	16.3	18.9	1.3
20	¾	100	75	4 x M12	20	40	131.5	69	51.5	15.5	9	10	7	32	4 x M5	29.5	34.2	1.9
25	1	110	85	4 x M12	24	46	174.5	80	60	19.5	12	12	8	42 F04	4 x M5	43	50	2.7
32	1 ¼	130	100	4 x M16	28	54	174.5	84	64.5	16.5	12	12	8	52 F04	4 x M5	89	103	4.2
40	1 ½	150	110	4 x M16	31.75	63.5	250.5	100	76.5	23.5	14	16	10	50 F05	4 x M6	230	267	4.2
50	2	165	125	4 x M16	41	82	250.5	108.5	86	24	15	16	10	50 F05	4 x M6	265	307	5.8
65	2 ½	185	145	4 x M16	51.5	103	321.5	128	104.5	28	18	20	14	70 F07	4 x M8	540	626	8.9
80	3	200	160	8 x M16	61	122	321.5	137.5	114	28	18	20	14	70 F07	4 x M8	873	1013	12.4
100	4	220	180	8 x M16	76	152	381.5	156.5	137	34.5	22	24	18	102 F10	4 x M10	1390	1612	18.6
125	5	250	210	8 x M16	98	196	381.5	178.5	159	34	22	24	18	102 F10	4 x M10	1707	1980	37.3
150	6	285	240	8 x M20	116	232	700	237	201.5	51.5	30	42	30	125 F12	4 x M12	2024	2258	48

# K-BALL FIG V72/V74 WAFER STYLE BALL VALVES

## PRESSURE/TEMPERATURE GRAPH



### NOTES

The pressure/temperature graph applies to all sizes  
 Graph line A - Standard (Model V72)  
 Graph line B - Fire Tested (Model V74)

## OPERATING TORQUES (Nm)

TABLE 1

Size	1 bar	5 bar	10 bar	16 bar
DN 15	8	9	9	10
DN 20	16	17	17	18
DN 25	21	22	22	22
DN 32	22	23	23	23
DN 40	47	50	50	51
DN 50	48	51	54	56
DN 65	49	53	60	66
DN 80	109	140	144	154
DN 100	130	160	164	174
DN 125	270	300	310	330
DN 150	280	480	540	627

### NOTES

- Table 1 gives operating torques (Nm) with demineralised water at 20°C, using PTFE seats.
- Table 2 gives operating torque (Nm) with demineralised water at 1 bar differential pressure, using PTFE seats.
- CAUTION  
 Operating torque will vary depending on the nature of the fluid, its temperature and pressure, the frequency of operation, seat material, etc.

TABLE 2

Size	-20°C	20°C	50°C	100°C	150°C
DN 15	15	8	18	10	8
DN 20	25	16	27	18	16
DN 25	30	21	33	24	21
DN 32	35	22	38	26	22
DN 40	45	37	47	42	37
DN 50	60	48	54	50	48
DN 65	90	49	58	54	49
DN 80	150	109	117	112	109
DN 100	250	130	170	150	140
DN 125	460	270	400	350	320
DN 150	710	280	490	400	350