

BALLOSTAR KHA-F

Flange design



Product details

- » PN 16/25/40/63/100, ASME CL150/300
- » DN 15-125 and 1/2"-5"
- » Housing: Cast steel, rust and acid proof cast iron, duplex
- » Ball: Special materials on demand
- » Op. stem: Rust & acid proof steel

Connections Flange in acc. with DIN EN 1092-1 or ASME B 16.5

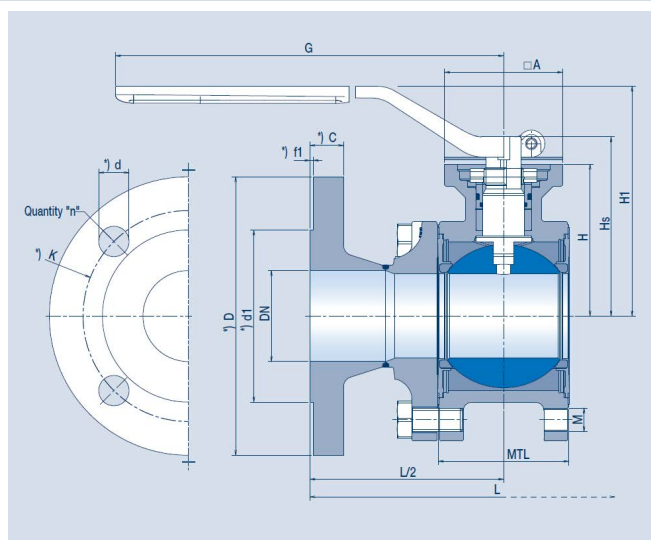
General features

- » 3-piece ball valve with full bore
- » Floating ball, antistatic, lockable
- » Double tightness in both directions
- » Modular system components

Temperature -196 °C to +400 °C (see pT diagram)

Certificates

- » Leak-testing according ISO 5208 / ISO 14313:2007 – DBB
- » FS EN ISO 10497 + API 607
- » TA LUFT (VDI 2440)
- » ISO 15848
- » BAM Oxygen, GAS (ÖVGW, DVGW), SIL2



* Flange dimensions in accordance with DIN EN 1092-1 or ASME B 16.5

Dimensions Face-to-face dimensions in acc. with EN 558-1, series 1 or dimensions in acc. with ANSI B16.10 CL 300

Industries

District Heating | Steel | Power | Geothermal Energy | Oil & Gas | Chemical Industry | Pulp & Paper | Energy | Food & Beverage | Pharma | Mining | Metals | Aerospace | Water

AREAS OF UTILIZATION

	Recommended
	Less suitable
	Not recommended

Stuffing boxes

	FS Atlas/Graphite/ Peek	LABP PTFE Labyrinth/ Peek	PTFE PURE PTFE/ Peek	GRA Graphite/Peek	GAS Gas O-rings & Graphite/Peek	VIT		
						Viton	Atlas	C70M
Media	Water / hot water	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Mineral oil	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Heat-transfer oil	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Liquid gas / 1) cryogenic temperature	Less suitable	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Saturated steam	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Misc. gases	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Vacuum / full vacuum	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Hot steam (max. 300 °C)	Less suitable	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Ammonia	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Oxygen	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Operating conditions	Standard utilization	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	High number of cycles	Recommended	Recommended	Less suitable	Recommended	Recommended	Recommended	Recommended
	Frequent temperature changes	Recommended	Recommended	Less suitable	Recommended	Recommended	Recommended	Recommended
	Fire safety (Fire-Safe)	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Chemical industry	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Certifications	Abrasive media	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Temperature range (°C)	-20 +300	-196 +300	-196 +300	-85 +400	-15 +150	-15 +150	-20* +250
	VDI 2440 (TA-Luft)	+	+	+			+	
ISO 15848-1	+							
DVGW/ÖVGW					+			
Fire-Safe	+				+			

Sealing elements

	FF Standard KFC Fire-Safe	PP PTFE	MM Metal	SS Metal special	WV Viton	KK Standard KFC	GG Gas KFC Fire-Safe
Water / hot water	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Mineral oil	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Heat-transfer oil	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Liquid gas / 1) cryogenic temperature	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Saturated steam	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Misc. gases	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Vacuum / full vacuum	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Hot steam (max. 300 °C)	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Ammonia	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Oxygen	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Standard utilization	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
High number of cycles	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Frequent temperature changes	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Fire safety (Fire-Safe)	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Chemical industry	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Abrasive media	Recommended	Recommended	Less suitable	Less suitable	Recommended	Recommended	Recommended
Temperature range (°C)	-60/+300	-196/+200	-60/+300	-60/+400	-15/+150	-60/+300	-60/+300
VDI 2440 (TA-Luft)	+					+	
ISO 15848-1	+						+
DVGW/ÖVGW							(+)
Fire-Safe	+						+

1) Combined with cryogenic temperature extension and sealing element
* O-rings for less temperature optionally available.

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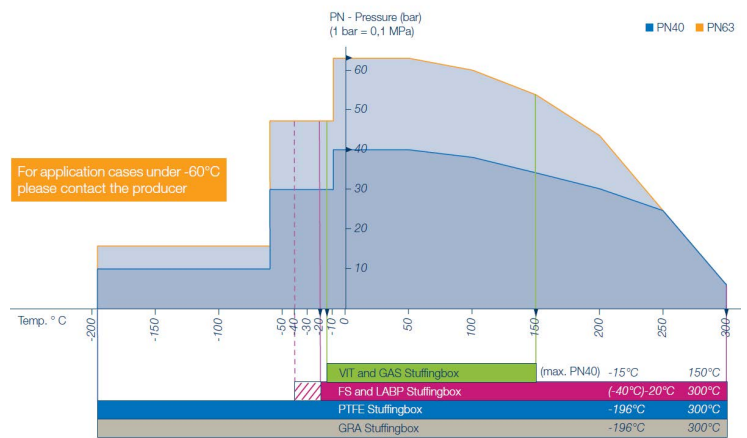
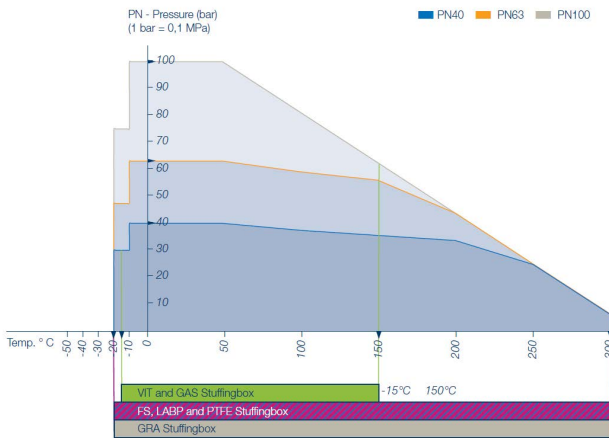
Pressure and temperature ranges / Technical data



P-T diagram – for the sealing elements FF, KK, GG and MM

Carbon steel

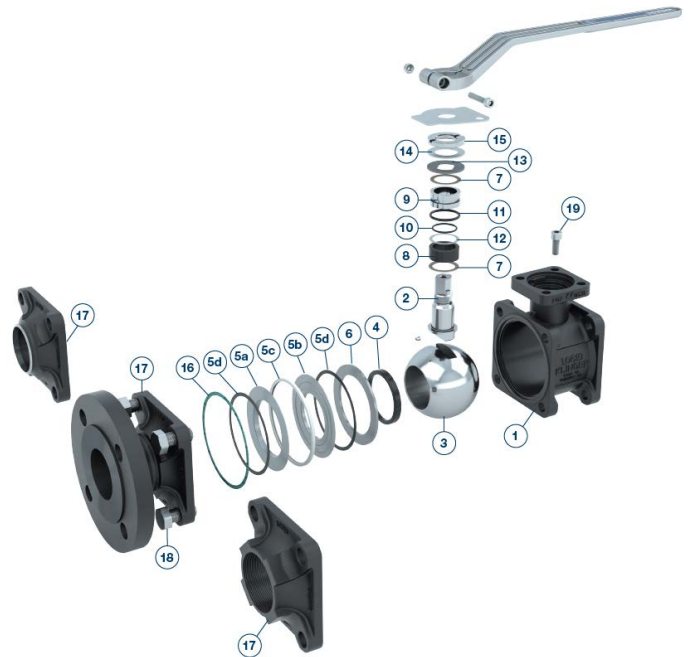
Stainless steel



For more P-T diagrams concerning different sealing materials and ASME please see the KLINGER Ballostar KHA brochure 2023

Parts list

Pos.	Qu.	Name	M1 (VIII)	M2 (Xc)	M3 (Xd)
1	1	Housing	1.0619	1.4408	1.4470
2	1	Operating shaft	1.4104	1.4404	1.4462
3	1	Ball		V4A	1.4462 / 1.4470
4	2	Sealing ring		KFC-25	
5	2	a) support disc	1.4401		1.4462
		b) cover disc	1.4401		
		c) U-sleeve		PTFE	
		d) U-sleeve		Grafit	
6	2	Support ring	1.4401		-
7	2	Bearing disc		Peek	
8	1	Sealing bush		Graphite	
9	1	Sealing insert		1.4401	
10	1	O-Ring		FEPM A75H	
11	1	O-Ring			
12	1	Washer		1.4401	
13	1	Washer		1.4401	
14	1	Belleville washer		1.4310	
15	1	Gland nut		1.4404	
16	2	Gasket		KLINGERSIL C-4430	
17	2	Flange cap	1.0619 / P235GH	1.4408 / 1.4470	1.4462 / 1.4470
	2	Welding ends			
	2	Threaded connection	1.0619	1.4408	1.4462
18	8/12/16	Hexagon nut		A4-70	
19	1	Socket screw		A4-70	



Technical data - M1 (VIII) = Carbon steel, M2 (Xc) = Stainless steel, M3 (d) = Duplex

DN	Dimensions										Pressure level		Head flange size acc. to ISO 5211	Weight [kg]
	MTL	□A	H	Hs	H1	G	M	L (EN)	L (ASME)	M1 (VIII)	M2 (Xc)			
15	1/2"	26.4	42	35.0	43.5	83.0	130	M6	130	140	100	63	F04	2.3
20	3/4"	35.2	42	46.5	57.0	96.0	160	M8	150	152	100	63	F04	3.5
25	1"	41.5	42	50.0	60.5	100.0	160	M8	160	165	63	40	F04	4.3
32	1-1/4"	49.5	50	65.0	77.7	107.5	252	M10	180	178	63	40	F05	6.8
40	1-1/2"	63.0	50	72.5	85.2	114.7	252	M12	200	190	63	40	F05	9.0
50	2"	77.5	70	90.0	106.2	136.2	310	M14	230	216	40	40	F07	13.5
65	2-1/2"	93.5	70	100.0	116.2	146.2	310	M12	290	241	40	40	F07	18.0
80	3"	111.4	102	121.5	143.0	165.0	500	M16	310	282	40	40	F10	28.8
100	4"	131.6	102	135.0	156.5	178.5	500	M16	350	305	40	40	F10	40.6
125	5"	171.4	125	175.0	202.5	212.5	650	M16	400	381	40	40	F12	66.0