

BALLOSTAR KHA-S

Welding ends design



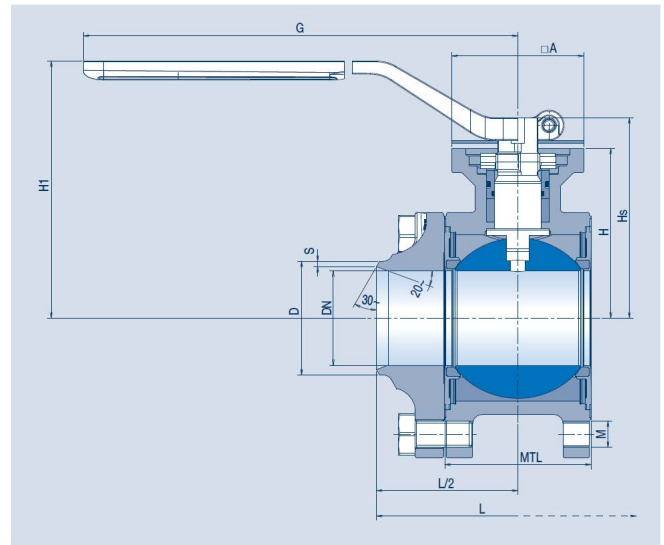
- Product details**
- » PN 16/25/40/63/100, ASME CL150/300
 - » DN 15-125 and 1/2"-5"
 - » Housing: Cast steel, rust and acid proof cast iron, duplex
 - » Ball: Special materials on demand
 - » Op. stem: Rust & acid proof steel

Connections Welding ends in acc. with DIN EN 12627

- 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

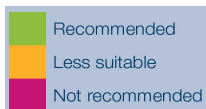


Dimensions Dimensions in acc. with EN 12982, series 67 (DN 15-125)

Industries

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

AREAS OF UTILIZATION



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
Water / hot water	Green	Green	Green	Green	Green	Green	Green	Green
Mineral oil	Green	Green	Green	Green	Green	Green	Green	Green
Heat-transfer oil	Green	Green	Green	Green	Green	Green	Green	Green
Liquid gas / 1) cryogenic temperature	Orange	Green	Green	Green	Green	Green	Green	Green
Saturated steam	Green	Green	Green	Orange	Green	Green	Green	Green
Misc. gases	Green	Green	Green	Green	Green	Green	Green	Green
Vacuum / full vacuum	Green	Green	Green	Green	Green	Green	Green	Green
Hot steam (max. 300 °C)	Orange	Green	Green	Green	Green	Green	Orange	Green
Ammonia	Green	Green	Green	Green	Green	Green	Green	Green
Oxygen	Green	Green	Green	Green	Green	Green	Green	Green
Standard utilization	Green	Green	Green	Green	Green	Green	Green	Green
High number of cycles	Green	Green	Orange	Green	Green	Green	Green	Green
Frequent temperature changes	Green	Green	Orange	Green	Green	Green	Green	Green
Fire safety (Fire-Safe)	Green	Green	Green	Green	Green	Green	Green	Green
Chemical industry	Green	Green	Green	Green	Green	Green	Orange	Green
Abrasive media	Green	Green	Orange	Green	Green	Green	Orange	Green
Temperature range (°C)	-20 +300	-196 +300	-196 +300	-85 +400	-15 +150	-15 +150	-20/+250	-35/+125
VDI 2440 (TA-Luft)	+	+	+		+		+	
ISO15848-1	+							
DVGW/ÖVGW					+			
Fire-Safe	+				+			

Sealing elements

	FF Standard KFC Fire-Safe	PP PTFE	MM Metal	SS Metal special	W Viton	KK Standard KFC	GG Gas KFC Fire-Safe
Water / hot water	Green	Green	Orange	Orange	Green	Green	Green
Mineral oil	Green	Green	Orange	Orange	Green	Green	Green
Heat-transfer oil	Green	Green	Orange	Orange	Green	Green	Green
Liquid gas / 1) cryogenic temperature	Green	Green	Green	Green	Green	Green	Green
Saturated steam	Green	Green	Orange	Orange	Green	Green	Green
Misc. gases	Green	Green	Orange	Orange	Green	Green	Green
Vacuum / full vacuum	Green	Green	Green	Green	Green	Green	Green
Hot steam (max. 300 °C)	Green	Green	Green	Green	Green	Green	Green
Ammonia	Green	Green	Green	Green	Green	Green	Green
Oxygen	Green	Green	Green	Green	Green	Green	Green
Standard utilization	Green	Green	Green	Green	Green	Green	Green
High number of cycles	Green	Green	Orange	Orange	Green	Green	Green
Frequent temperature changes	Green	Green	Orange	Orange	Green	Green	Green
Fire safety (Fire-Safe)	Green	Green	Green	Green	Green	Green	Green
Chemical industry	Green	Green	Orange	Orange	Green	Green	Green
Abrasive media	Green	Green	Orange	Orange	Green	Green	Green
Temperature range (°C)	-60/+300	-196/+200	-60/+300	-60/+400	-15/+150	-60/+300	-60/+300
VDI 2440 (TA-Luft)	+					+	
ISO15848-1	+						+
DVGW/ÖVGW							(+)
Fire-Safe	+						+

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

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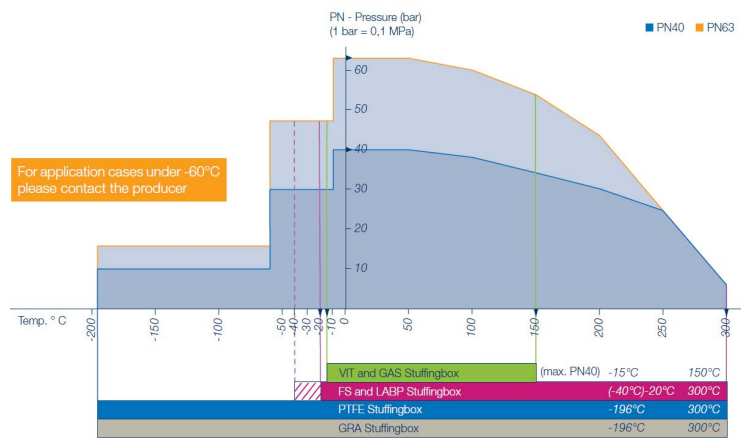
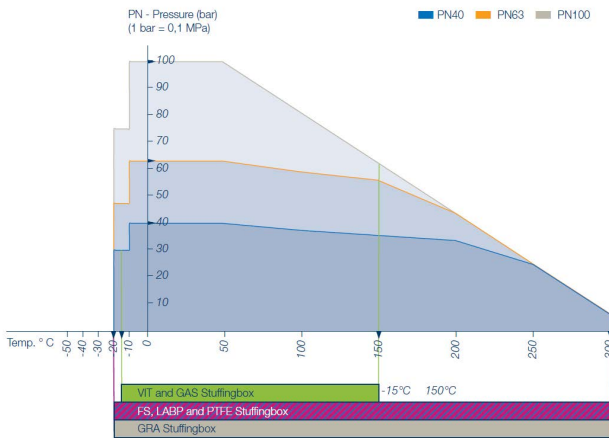
Pressure and temperature ranges / Technical data



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

Carbon steel

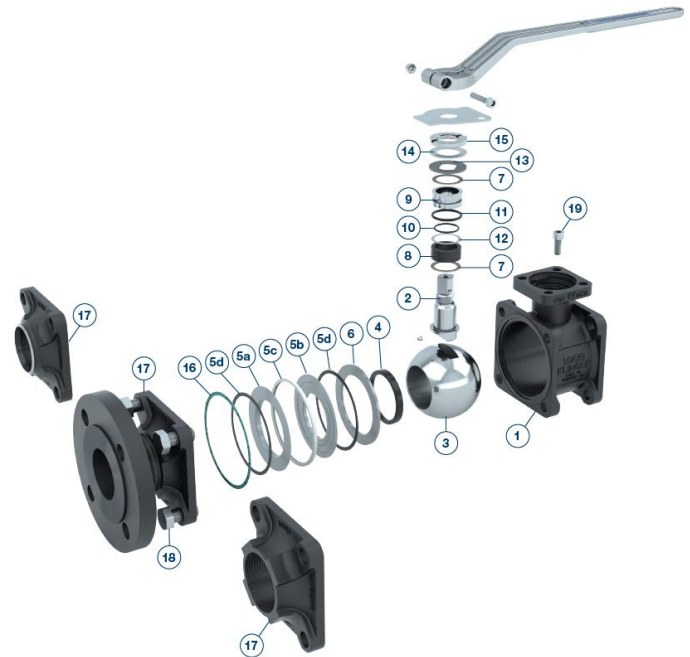
Stainless steel



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	D	S	□A	H	Hs	H1	G	M	Total face-to-face length L	M1 (VIII)	M2 (Xc)		
15	26.4	21.3	2.0	42	35.0	43.5	83.0	130	M6	75	100	63	F04	0.85
20	35.2	26.9	2.5	42	46.5	57.0	96.0	160	M8	90	100	63	F04	1.45
25	41.5	33.7	2.6	42	50.0	60.5	100.0	160	M8	100	63	40	F04	1.80
32	49.5	42.4	2.6	50	65.0	77.7	107.5	252	M10	110	63	40	F05	3.10
40	63.0	48.3	3.2	50	72.5	85.2	114.7	252	M12	125	63	40	F05	4.75
50	77.5	60.3	2.9	70	90.0	106.2	136.2	310	M14	150	40	40	F07	7.60
65	93.5	76.1	3.1	70	100.0	116.2	146.2	310	M12	190	40	40	F07	10.60
80	111.4	88.9	3.2	102	121.5	143.0	165.0	500	M16	220	40	40	F10	19.50
100	131.6	114.3	3.6	102	135.0	156.5	178.5	500	M16	270	40	40	F10	28.00
125	171.4	139.7	4.0	125	175.0	202.5	212.5	650	M16	330	40	40	F12	49.50