

PFA ball valve type FK13



description:

Flange ball valve spheroidal graphite cast iron with steel handle, ball in PFA. Ideal for pipeline systems.

features:

- suitable for aggressive **gaseous & liquid media**
- one-piece PFA lining
- the integrated stand
- TA-Luft
- Blowout proof selector shaft
- Epoxy coating according to ISO 12944-5 C2M
- Leakage-free operation due to large ball sealing rings
- Patented technology
- No deposits or residues from medium

connection:

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN150

construction:

full port design

pressure:

0 – 16 bar

temperature

-20°C bis +200°C

design:

body:

Two-piece ball valve with full port design
spheroidal graphite cast iron 5.3103 epoxy coating
color blue (RAL 5005)

lining:

PFA

face-to-face:

EN 558, Row 1
ASME B16.10 Class 150, Row 20/21

ball material:

PFA

sealing surface:

DIN EN 1092-1

flange connection:

acc. to EN 1092-1 PN10-16 (DN15 to DN150)
ASME B16.5, Class 150

top flange:

DIN ISO 5211

pressure test:

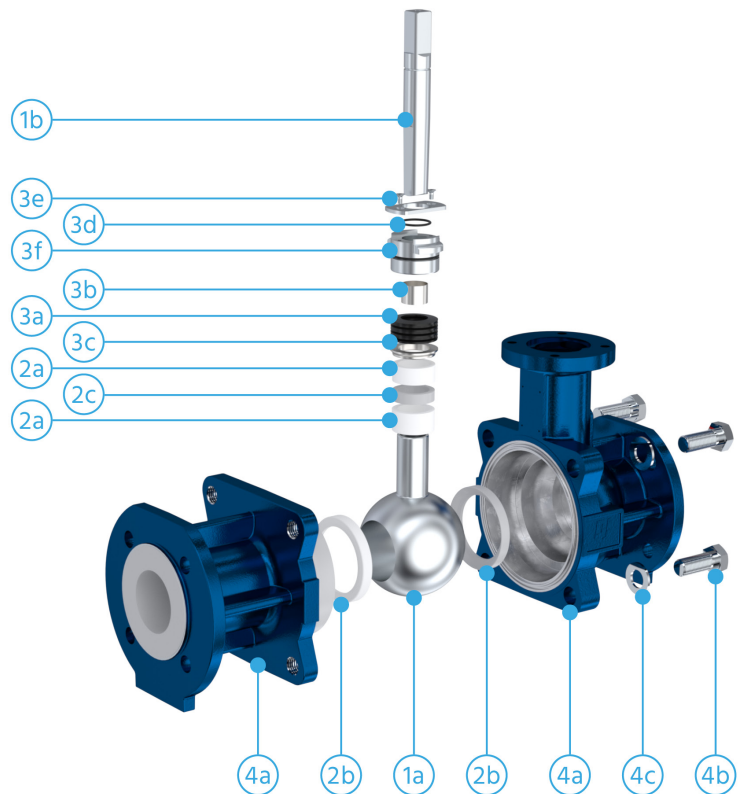
EN 12266-1

Standards:

- Top flange acc. to ISO 5211
- PED 2014/68/EU
- Pressure test acc. to EN12266-1
- Face-to-face length acc. to EN558, Row 1
- Face-to-face length acc. to ASME B16.10, Class 150, Row 20/21
- TA-Luft, ISO 15848-1
- FDA 1935/2004
- ATEX 2014/34/EU

Material description:

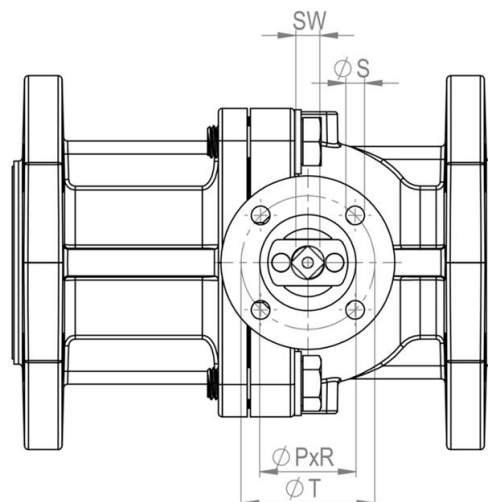
no.	part	material
1a	ball	PFA
1b	stem	1.4404
2a	chevron seals	PTFE
2b	ball seals	PTFE
2c	spacer	PTFE
3a	belleville springs	carbon steel
3b	shaft bushing	PTFE / steel
3c	pusher	1.4301
3d	spring-lock washer	1.4301
3e	locking plate & screws	1.4404
3f	bayonet coupling	1.4404
4a	valve body	5.3103
4b	body bolts	stainless steel
4c	washers	stainless steel



Dimensions:

Stem end:

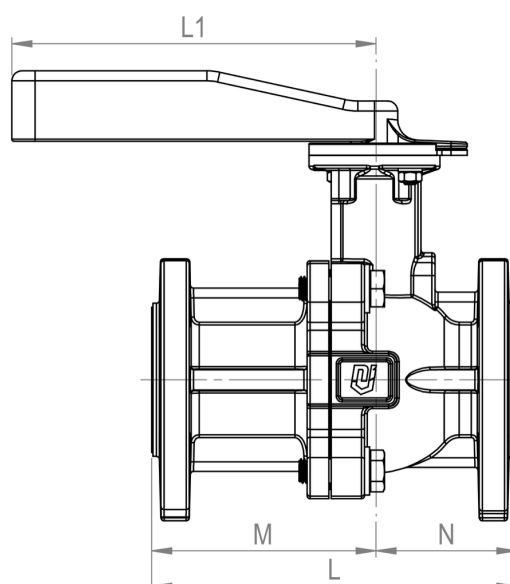
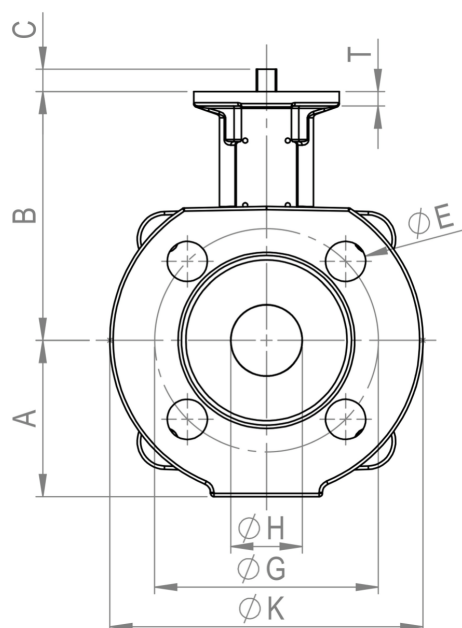
DN	15	20	25	32	40	50	65	80	100	150
SW	9	9	9	9	17	17	22	22	22	27
øU	12	12	12	12	22	22	28	28	28	36
ISO	F05	F05	F05	F05	F07	F07	F10	F10	F10	F12
øT	50	50	50	50	70	70	102	102	102	125
øS	4x7	4x7	4x7	4x7	4x9	4x9	4x11	4x11	4x11	4x13
øPxR	36x3.5	36x3.5	36x3.5	36x3.5	56x3.5	56x3.5	71x3.5	71x3.5	71x3.5	86x3.5



Dimensions:

PN10-16*

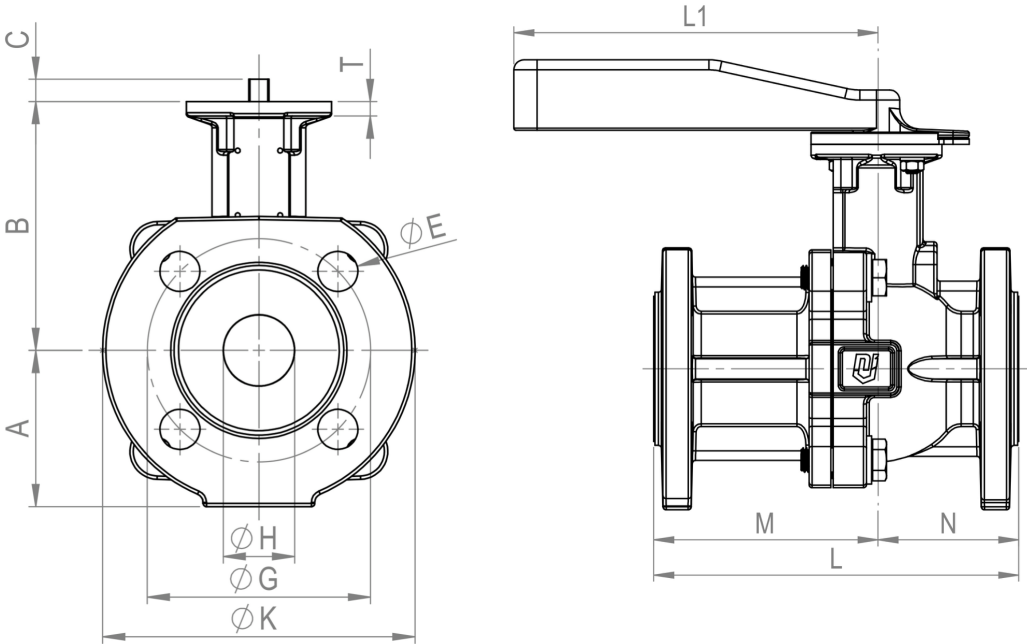
DN [inch]	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
øH	15	20	25	32	40	50	65	80	100	150
L	130	150	160	180	200	230	290	310	350	480
øG	65	75	85	100	110	125	145	160	180	240
øE	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x18	8x22
øK	95	105	115	140	150	165	185	200	220	285
M	76	91	98.5	110	121	144	175	185	205	270
N	54	59	61.5	70	79	86	115	125	145	210
A	50	52.5	57.5	70	75	82.5	95	105	121	157
B	103	105.5	108	111.5	151.5	156.5	189.5	197	214	281.5
C	10	10	10	10	19	19	24	24	24	29
T	6	6,5	6,5	6,5	8,5		16	16	16	19,5
kg	3.9	4.8	5.4	7.5	11.8	15.2	25.8	28	39.7	76.7



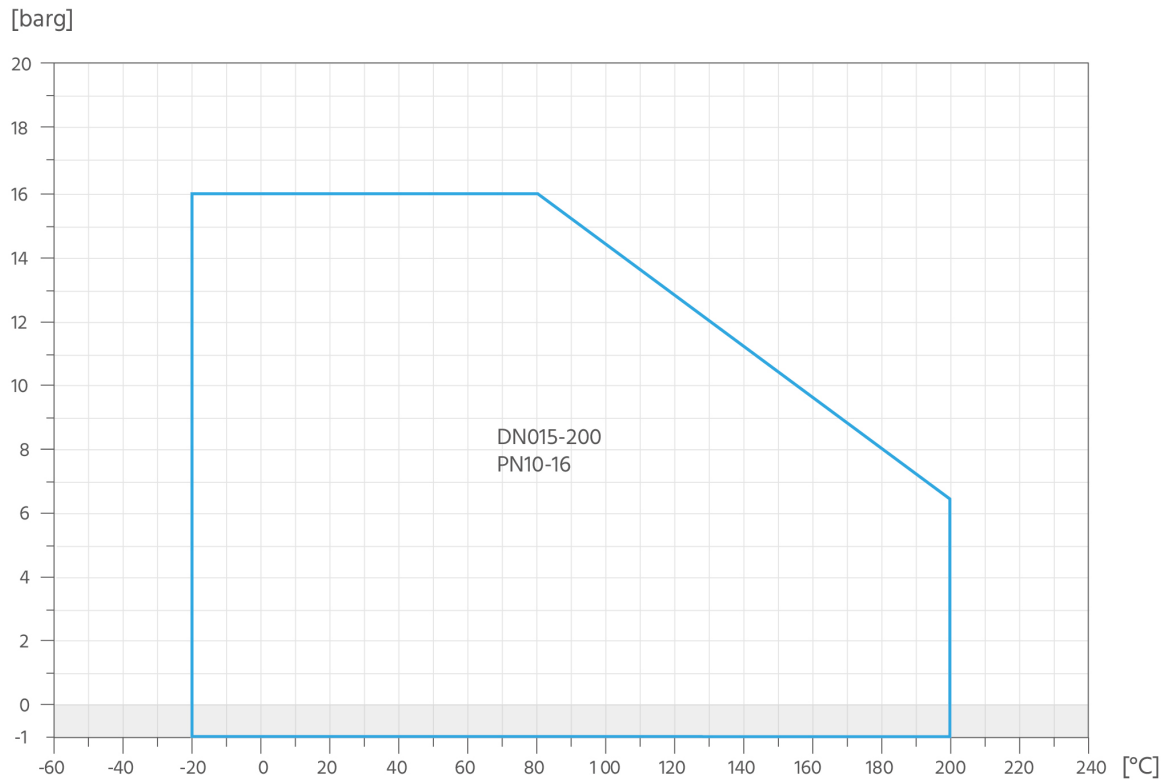
Dimensions:

ANSI

DN [inch]	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
øH	15	20	25	32	40	50	65	80	100	150
L	108	117	127	140	165	178	190	203	229	267
øG	60.3	69.9	79.4	88.9	98.4	120.7	139.7	152.4	190.5	241.3
øE	4x 13	4x 15.9	4x 15.9	4x 15.9	4x 15.9	4x 19	4x 19	4x 19	8x 19	8x 22.2
øK	90	100	110	115	125	150	180	190	230	280
M	58.5	63	66.5	72	86	93	100	104.5	117.5	129.5
N	49.5	54	60.5	68	79	85	90	98.5	111.5	137.5
A	50	52.5	57.5	61	75	82.5	95	105	121	157
B	103	105.5	108	111.5	151.5	156.5	182	197	214	281.5
C	10	10	10	10	19	19	24	24	24	29
T	6	6.5	6.5	6.5	8.5		16	16	16	19.5
kg	3.5	4.1	4.8	5.9	9.9	13.5	23.5	25.1	35.9	59.9



pressure-temperature diagram:

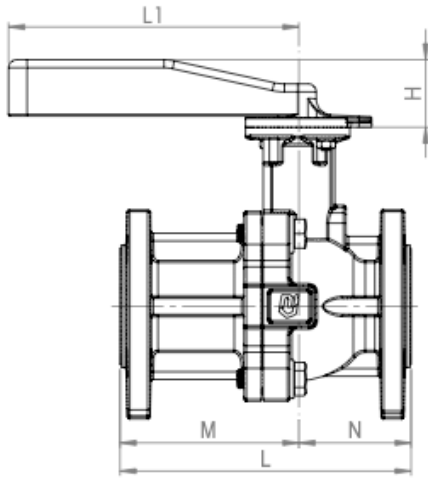


KV-Values [m³/h]:

opening angle	DN									
	15	20	25	32*	40	50	65*	80	100	150
0°	0	0	0	-	0	0	-	0	0	0
10°	0	0	0	-	0	0	-	0.7	0.8	8.2
20°	0	0	0	-	0	1.3	-	5.4	11.8	38.7
30°	0	0	0.5	-	1.5	5.4	-	18.3	30.3	87.8
40°	0.05	0.2	1.6	-	5.2	12.2	-	37	61.3	158.6
50°	0.2	0.8	3.9	-	11.4	23.3	-	66.7	107.2	267.6
60°	0.7	2	7.9	-	22.2	40.8	-	112	182.7	429.6
70°	1.8	4	13.9	-	38	65	-	170.8	284.4	651.2
80°	3.4	6.1	19.2	-	51.6	85.8	-	218.4	386	782.6
90°	3.8	7	20.8	-	57.3	93	-	237.3	392	847.2

*Calculations for these flow rates are pending

Handlever:



Material

grip	stainless steel
ratchet disc	stainless steel

DN (mm)	15	20	25	32	40	50	65	80	100
DN (inch)	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
H	46	46	46	46	55	55	55	55	55
L1	232.5	232.5	232.5	232.5	272.5	272.5	350	350	350
kg	1	1	1	1	1.5	1.5	2.7	2.7	2.7

Torques:

PN10-16

DN	15	20	25	32	40	50	65	80	100	150
Nm ¹⁾	18	18	18	18	78	78	120	120	168	240
Nm ²⁾	50	50	50	50	166	166	359	359	359	665

ANSI

DN	15	20	25	32	40	50	65	80	100	150
Nm ¹⁾	18	18	18	22	78	78	80	120	168	240
Nm ²⁾	50	50	50	24.6	166	166	359	359	359	665

¹⁾Maximum occurring torque

²⁾Maximum allowable stem torque: 1.4404, inc. 1,2 safety factor.

article number:

Type	Flange	Actuator	Lining	Size
FK13	00 – PN10-16 01 – ANSI	0 – handlever* 1 – gear box 6 – without	0 – PFA	03 – DN15 04 – DN20 05 – DN25 06 – DN32 07 – DN40 08 – DN50 09 – DN65 10 – DN80 11 – DN100 13 – DN150

example no. FK13010005:				
FK13	01	0	0	05

Flange ball valve made of spheroidal graphite cast iron
flange: ANSI
lining: PFA
Size: DN25

**only up to nominal size DN100

Image similar, subject change without notice.