

Flange ball valve carbon steel type FK12



description:

Flange ball valve in carbon steel with steel handle, ball in stainless steel. To shut off pipeline systems.

features:

- suitable for neutral and not neutral **gaseous & liquid media**
- free of silicone
- antistatic-device
- TA-Luft
- Fire-safe-design (optional)
- Drinking water (optional)
- VD TÜV (optional)
- blow out proof stem design

connection:

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150, DN200

construction:

full port design

pressure:

0 – 40 bar (depending on Design)

design:

Two-piece ball valve with full port design

ball:

Stainless steel 1.4408

handle:

Steel zinc plated 1.0619

face-to-face:

DIN EN 558 R 27 PN16

flange:

DIN EN 1092-1

flange connection:

EN 1092-1

mounting pad:

DIN ISO 5211

Overview of types:

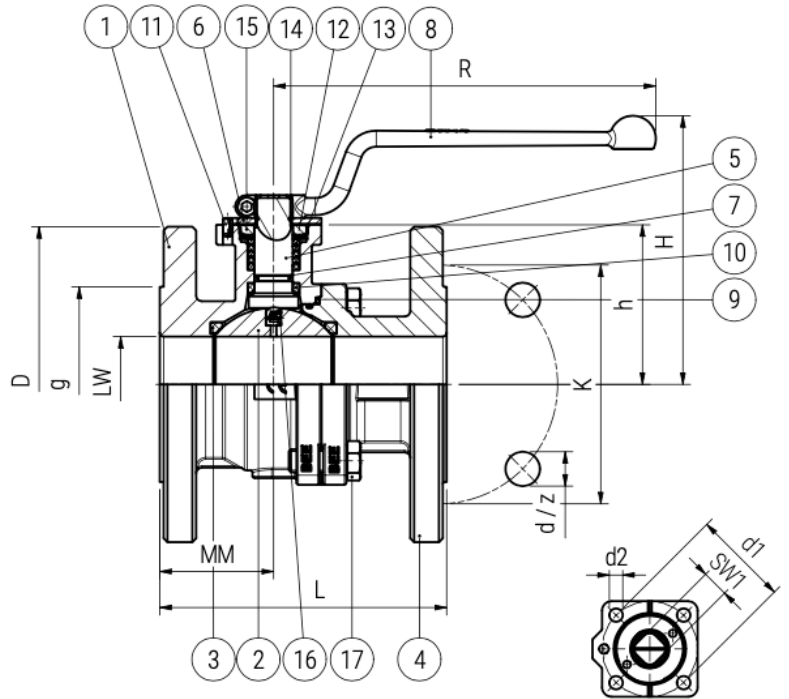
Type	ball seal & stem seal & body seal	temperature	media	pressure	dimension	certification
FK1200	Standard „E“ = PTFE GF & FKM PTFE & FKM TFM	-20°C to +180°C (depending on medium & dimension)	liquid and gaseous media	PN16	DN15-DN200	TA-Luft VdTÜV*
FK1200	Standard „E1“ = TFM & FKM PTFE & FKM TFM		liquid and gaseous media	PN40	DN15-DN100	TA-Luft VdTÜV*
FK1201	Steam „G“ = PTFE TFM & Graphite & Graphite	-20°C bis +220°C (depending on medium & dimension)	gaseous for example steam	PN16/40	PN16: DN15-DN200 PN40: DN15-DN100	TA-Luft VdTÜV*
FK1202	Fire Safe „S“ = TFM & FKM PTFE Graphite & FKM Graphite	-20°C bis +180°C (depending on medium & dimension)	liquid and gaseous media	PN16/40	PN16: DN15-DN200 PN40: DN15-DN100	TA-Luft Fire-Safe ISO 10497 / TÜV IS-DDB-MAN/001/08
FK1203	DVGW GAS „A“ = PTFE & FKM PTFE & FKM TFM	-20°C bis +180°C (depending on medium & dimension)	gaseous media	PN16	DN15-DN200	TA-Luft DVGW for gases acc. G260/1
FK1203	DVGW GAS „B“ = TFM & FKM PTFE & FKM PTFE-TFM		gaseous media	PN40	DN15-DN100	TA-Luft DVGW for gases acc. G260/1 Incl. 3.1 inspection + material certificate
FK1205	High temperature „D“ = Antimony - coal & Graphite & Graphite	-20°C bis +400°C (depending on media & dimension)	liquid and gaseous media**	PN16	DN20-DN100	TA-Luft
FK1206	High temperature „H“ = PEEK & Bronze Graphite & Graphite	-20°C bis +250°C (depending on media & dimension)	liquid and gaseous media**	PN16/40	PN16: DN20-DN100 PN40: DN20-DN100	TA-Luft

*for extra charge

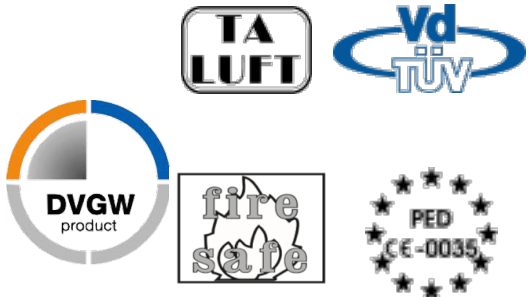
**Sealing system D & H for high temperatures are only offered after technical clarification specifying the medium, pressure and temperature

Material description:

no.	part	material
1	Body	Carbon steel 1.0619
2	Ball	Stainless steel 1.4408
3	Ball seal	*
4	Flange	carbon steel 1.0619
5	Stem	Stainless steel 1.4404
6	Stop plate	Steel zinc plated
7	Spindle seal	*
8	Handle	Steel zinc plated 1.0619
9	Body seal	*
10	Thrust washer	PTFE – GF
11	Stop pin	Steel zinc plated
12	Packing	*
13	Spring plate	Spring steel 1.4310
14	Clip ring	Spring steel 1.4310
15	Packing nut	Stainless steel 1.4404
16	Spring pressure	Stainless steel A2
17	Bolt	Stainless steel A2 70

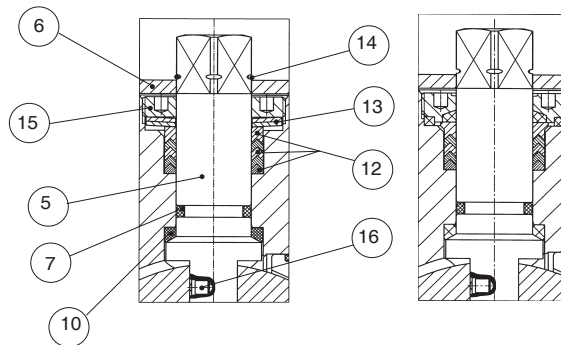


*see overview of types page 1



Standard

Fire-Safe



Dimensions:

DN	L	H	R	SW1	h1	h	Flange	D	g	K	b	z	d
15	115	99,0	140	9	9	43,5	F03	95	45	65	15	4	14
20	120	104,5	140	9	9,5	49	F03	105	58	75	17,5	4	14
25	125	109,0	165	11	12,5	59,5	F05	115	68	85	17,5	4	14
32	130	120,5	165	11	12,5	71	F05	140	78	100	17,5	4	18
40	140	132,5	200	14	14	75,5	F05	150	88	110	17	4	18
50	150	140,5	200	14	14	83,5	F05	165	102	125	19	4	18
65	170	163,0	230	17	18	103,5	F07	185	122	145	17,5	4	18,5
80	180	196,0	360	22	22,2	118	F10	200	138	160	23	8	18,5
100	190	212,5	360	22	22,3	135	F10	220	158	180	19	8	18,5
125	325	238,5	556	27	27	167	F10 / F12	250	188	210	21	8	18,5
150	350	260,8	556	27	27	189	F10 / F12	285	212	240	21	8	22,5
200	400	303	706	27	28	238	F12 / F14	340	268	295	23	12	22,5

Weight:

Size DN	15	20	25	32	40	50	65	80	100	125	150	200
PN16	2,35	2,95	4,10	5,60	6,65	9,10	13,50	19,20	25,40	37,50	63,50	126,00
PN40	2,34	2,95	4,01	5,63	6,81	9,13	14,50	20,00	32,00	-	-	-

article number:

Type	sealing system*	Flange	Size
FK12	00 – standard	00 – PN16 01 – PN40	03 – DN15
	01 – steam		04 – DN20
	02 – Fire Safe		05 – DN25
	03 – DVGW-gas G260/1		06 – DN32
	05 – High temperature graphite**		07 – DN40
	06 – High temperature PEEK**		08 – DN50
		09 – DN65	
		10 – DN80	
		11 – DN100	
		12 – DN125	
		13 – DN150	
		14 – DN200	

example no. FK05010005:

FK05 | **01** | **00** | **05**

Flange ball valve made of stainless steel

Sealing system: steam (PTFE/TFM + Graphite + Graphite)

Flange: PN16

Size: DN25

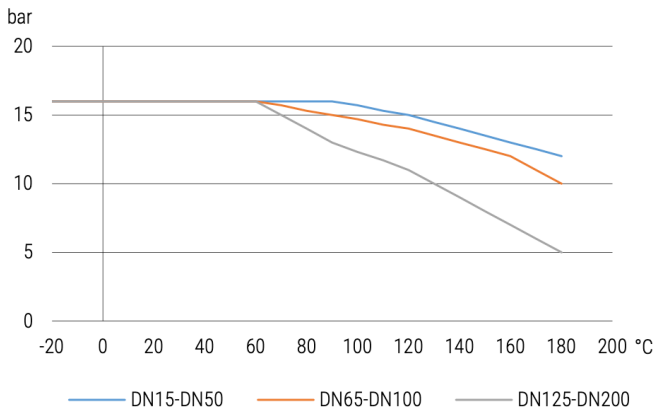
*Note: Not every sealing system can be combined with every pressure rating and every nominal size, see table on page 1.

**These sealing systems are only offered after technical clarification specifying the medium, pressure and temperature

Image similar, subject change without notice.

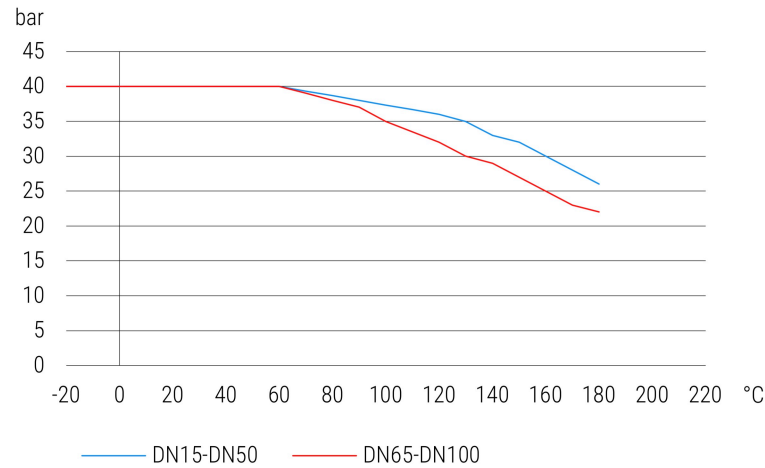
pressure-temperature diagram:

Standard version for liquid and gaseous media (flange PN16)



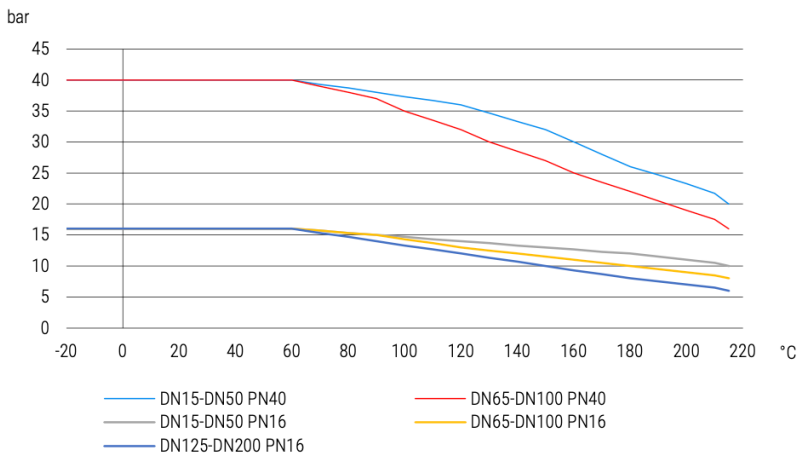
FK1200 – Standard „E”			
dimension	breakaway torque in Nm		
	PN0	PN7	PN16
15	5	5	5
20	8	8	8
25	9	9	9
32	18	18	18
40	25	25	25
50	30	30	30
65	40	45	55
80	60	60	65
100	90	90	105
125	105	105	120
150	120	150	190
200	250	250	400

Standard version for liquid and gaseous media (flange PN40)



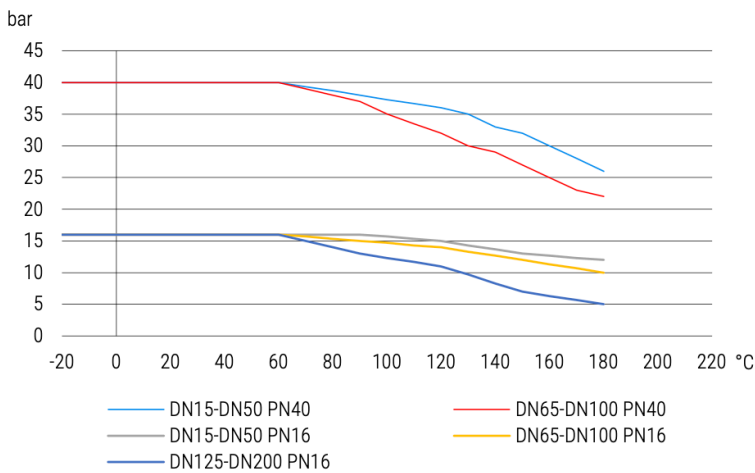
FK1200 – Standard „E1”				
dimension	breakaway torque in Nm			
	PN0	PN7	PN16	PN40
15	7	7	7	7
20	8	8	8	8
25	9	9	9	10
32	18	18	18	25
40	25	25	25	35
50	30	30	30	50
65	40	40	40	60
80	90	90	90	100
100	100	100	110	120

Steam version (flange PN16 & PN40)



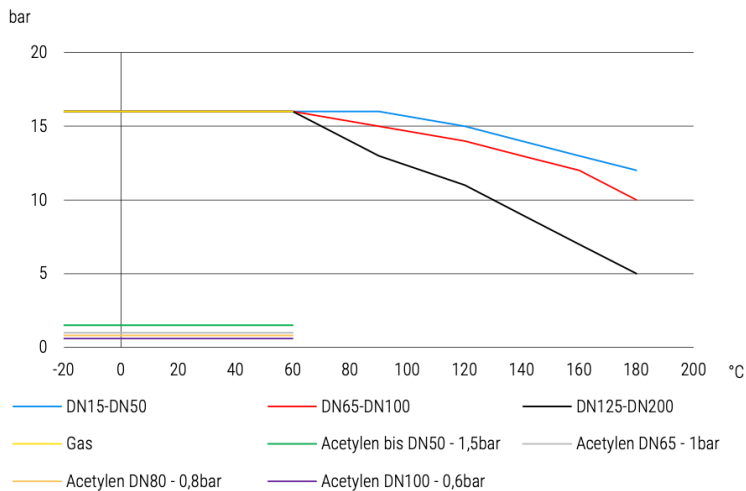
FK1201 – Steam „G”				
dimension	breakaway torque in Nm			
	PN0	PN7	PN16	PN40
15	7	7	7	7
20	13	13	13	13
25	15	15	15	15
32	35	35	35	35
40	40	40	40	40
50	50	50	50	60
65	60	60	60	80
80	100	100	110	130
100	110	110	120	150
125	140	140	170	
150	200	200	250	
200	400	400	450	

Fire-Safe version for liquid and gaseous media (flange N16 & PN40)



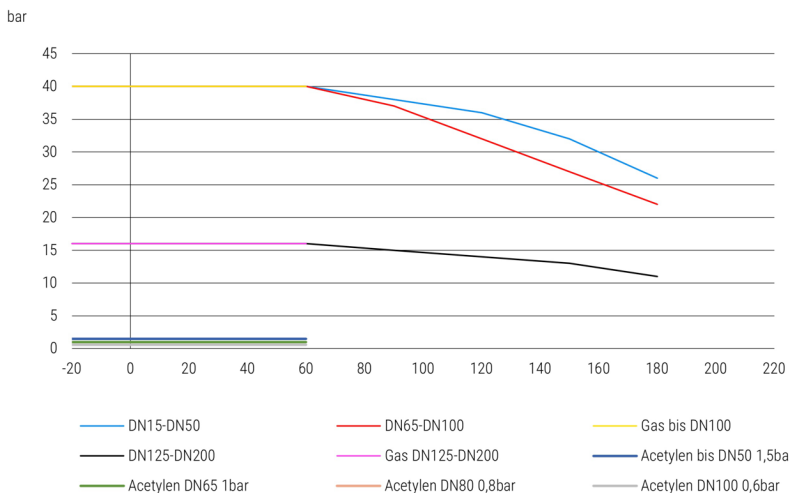
FK1202 – Fire-Safe „S“				
dimension	breakaway torque in Nm			
DN	PN0	PN7	PN16	PN40
15	7	7	7	7
20	8	8	8	8
25	9	9	9	10
32	18	18	18	25
40	25	25	25	35
50	30	30	30	50
65	40	40	40	60
80	90	90	90	100
100	100	100	110	120
125	110	110	120	
150	150	150	170	
200	300	300	350	

DVGW-gas version for gaseous media (flange PN16)



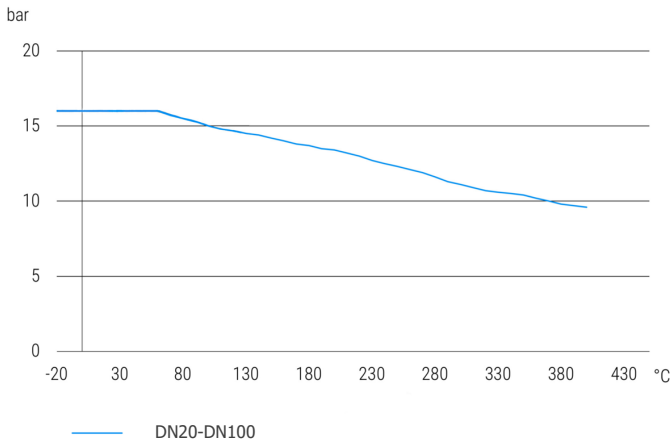
FK1203 – DVGW-gas „A“			
dimension	breakaway torque in Nm		
DN	PN0	PN7	PN16
15	4	4	4
20	8	8	8
25	9	9	9
32	18	18	18
40	20	20	20
50	30	30	30
65	55	55	55
80	85	85	95
100	100	100	110
125	115	125	145
150	180	210	230
200	400	420	450

DVGW-gas version for gaseous media (flange PN40)



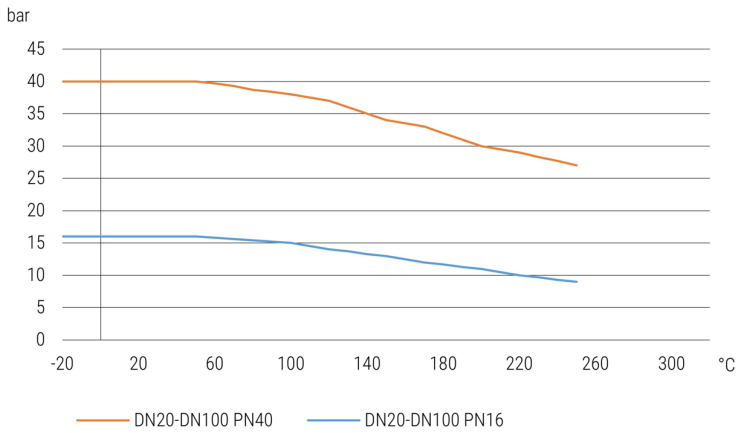
FK1203 – DVGW-gas „B“				
dimension	breakaway torque in Nm			
DN	PN0	PN7	PN16	PN40
15	7	7	7	7
20	8	8	8	8
25	9	9	9	10
32	18	18	18	25
40	25	25	25	35
50	30	30	30	50
65	40	40	40	60
80	90	90	90	100
100	100	100	110	120

High temperature version for liquid and gaseous media (flange PN16)



FK1205 – high temperature „D“			
dimension	breakaway torque in Nm		
DN	PN0	PN7	PN16
15			
20	13	13	15
25	15	15	20
32	35	35	40
40	40	40	50
50	50	50	60
65	60	80	100
80	100	120	140
100	110	140	170

High temperature version for liquid and gaseous media (flange PN16 & PN40)



FK1206 – high temperature „H“				
dimension	breakaway torque in Nm			
DN	PN0	PN7	PN16	PN40
15				
20	13	113	15	20
25	15	15	20	30
32	35	35	40	60
40	40	40	50	70
50	50	50	60	90
65	60	80	100	140
80	100	120	140	180
100	110	140	170	200