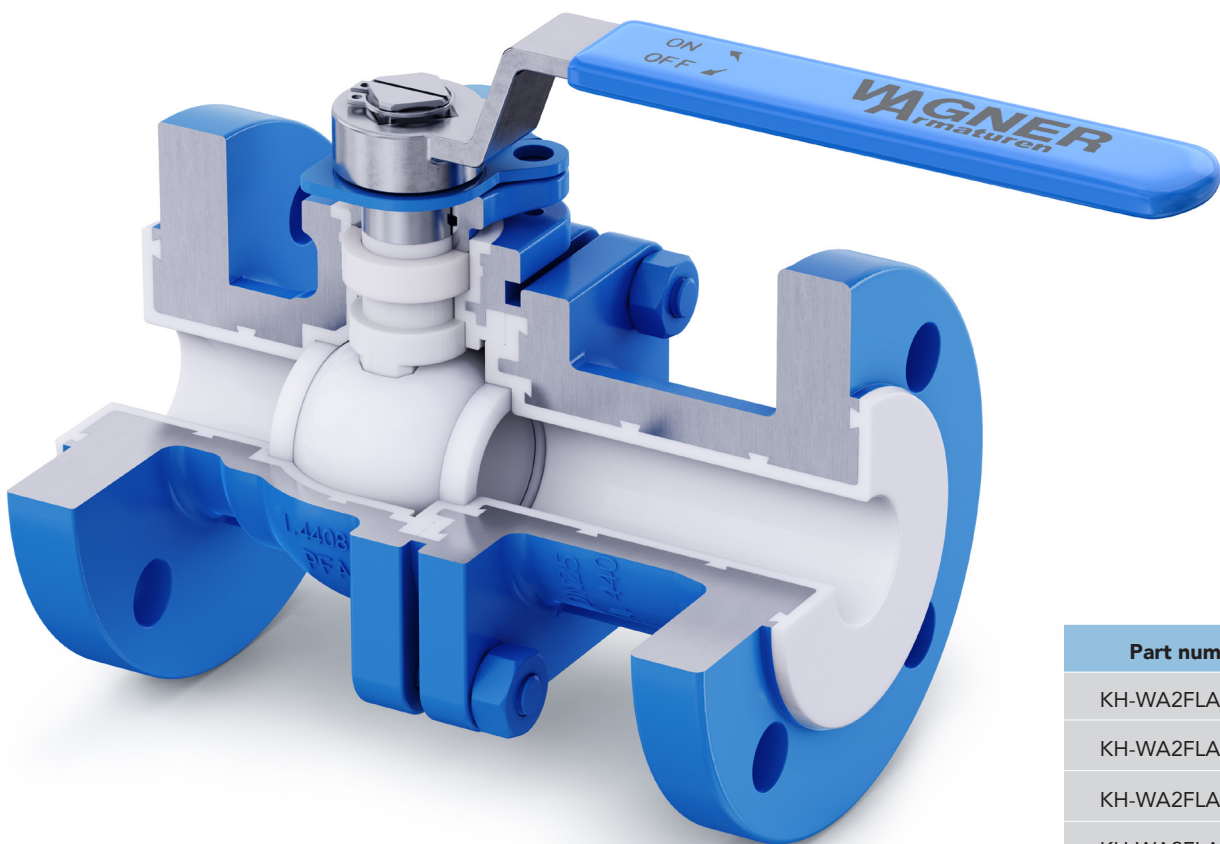


Diffusion and corrosion Light years ahead

Ball valves and butterfly valves with astronomically good protection

PFA-lined WA ball valves - reliable with acids, alkalis & Co.

Reliable and cost-effective - PFA-lined WA ball valves give you options for use in pharmaceutical or chemical plants as well as use with foodstuffs.



Your advantages with the KH-WA2FLAS:

- **emission-free certified according to DIN EN ISO 15848:**
by v-shaped PTFE or TFM1600 spindle seal, according to new TA-Luft
- **special seat design:**
For low operating torque and reliable sealing performance
- **vacuum-proof:**
due to dovetail-like anchoring of the PFA lining in the housing
- **high quality lining:**
100% spark test for all manufactured PFA ball valves

Part numbers

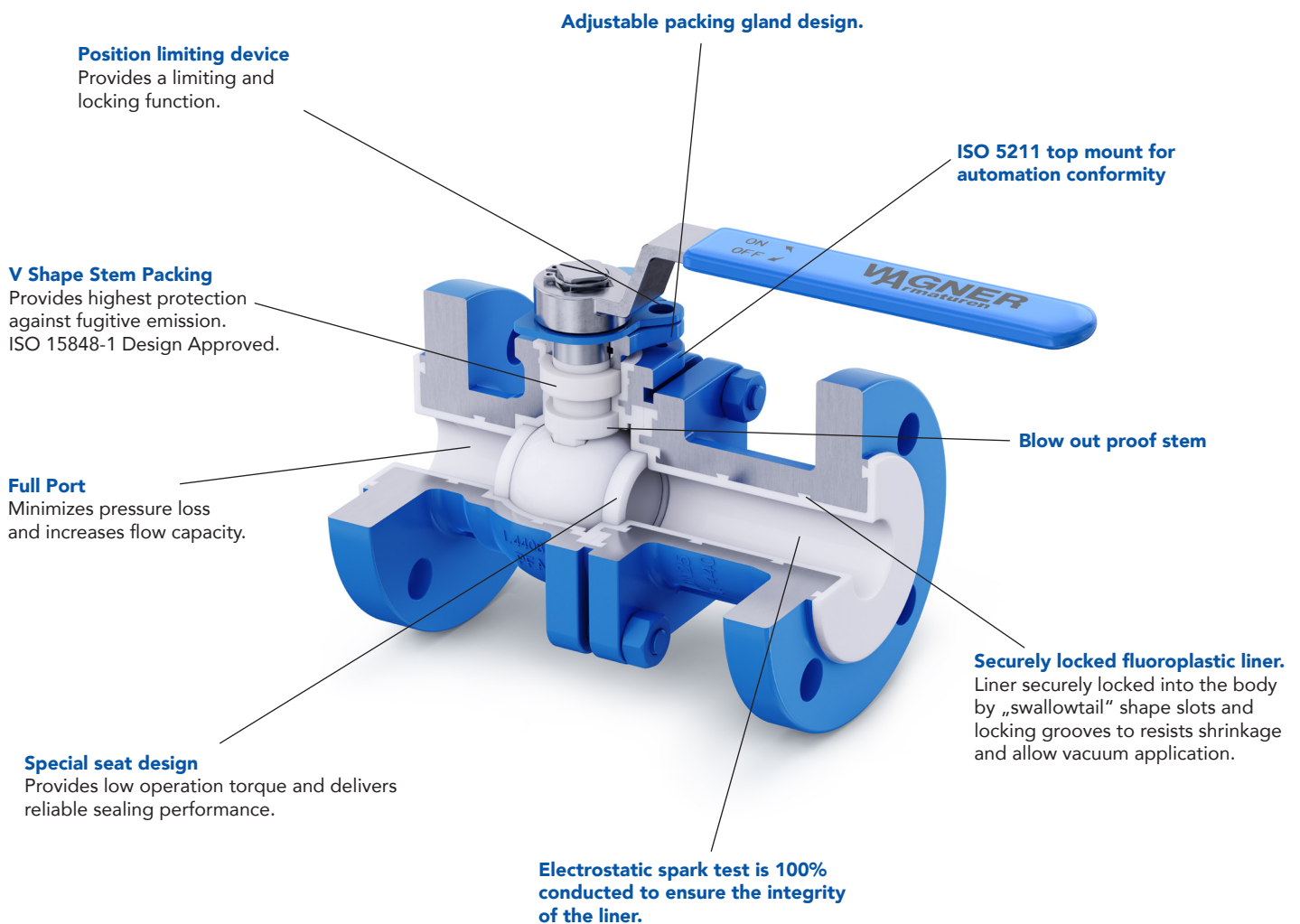
KH-WA2FLAS-15-16
KH-WA2FLAS-20-16
KH-WA2FLAS-25-16
KH-WA2FLAS-32-16
KH-WA2FLAS-40-16
KH-WA2FLAS-50-16
KH-WA2FLAS-65-16
KH-WA2FLAS-80-16
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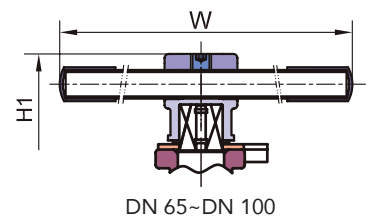
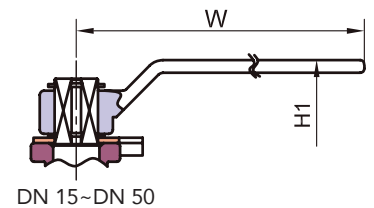
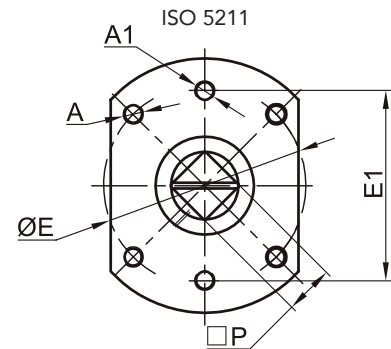
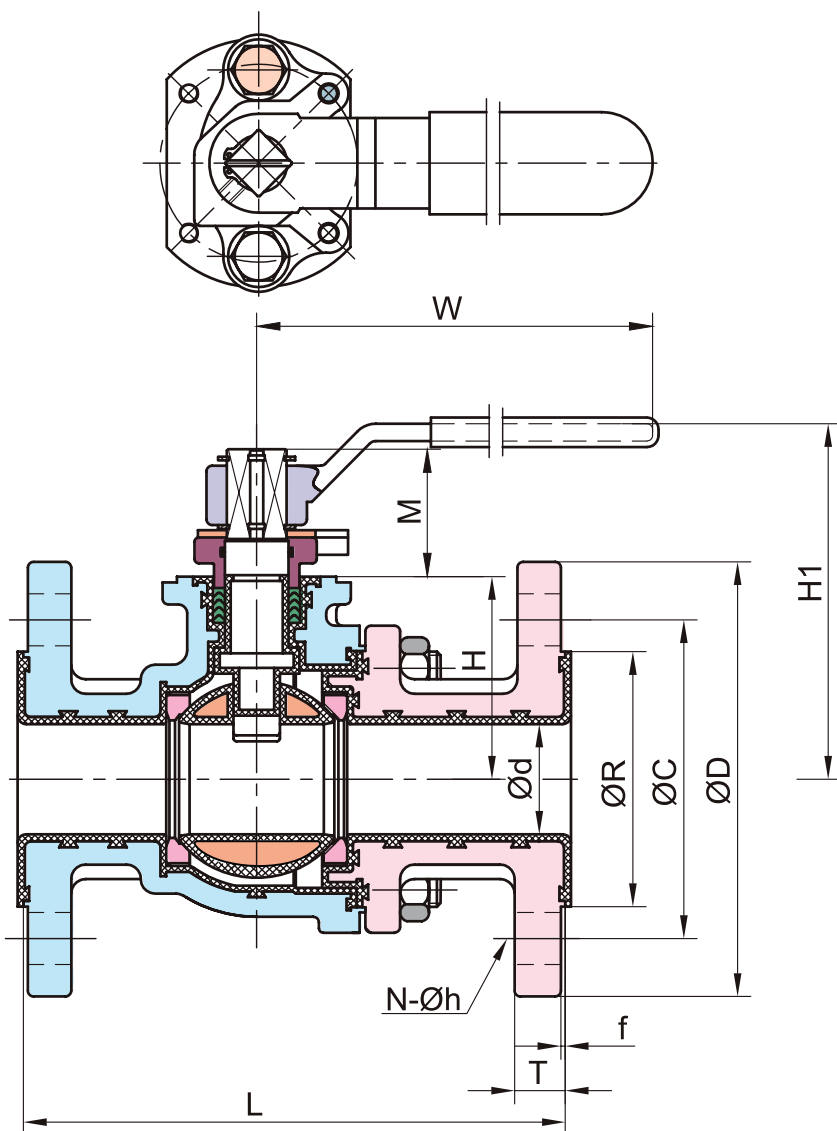


Product features

The lined ball valve's PFA components are manufactured with custom molds to gain a precise surface contour for perfect sealing. The V-shaped PTFE or TFM 1600 stem packing provides leak-free and emission-free shaft sealing. PFA (perfluoroalkoxy polymers) is suitable for highly corrosive media.

Both the inner chamber and the ball are manufactured by high-pressure injection molding. The corrosion and aging resistant PFA lining provides reliable corrosion protection and leak tightness. The fluorine-lined ball valve is suitable for use in the petrochemical, chemical, food processing and pharmaceutical industries to withstand highly corrosive media such as acids and alkalis in the production process.





- Design Standard: EN12516-1
- Pressure Rating: EN PN16
- Wall Thickness: EN12516-1
- Face to Face: EN558 Reihe1
- Flanged Ends: EN1092-1
- Inspection & Testing: EN12266-1
- ISO 15848-1 Type-tested

EN PN16

DN	d	R	C	D	L	T	f	N	h	H	H1	M	W	P	E	E1	A	A1	ISO
15	15	45	65	95	130	16	2	4	14	39	81.5	20	130	9	42	42	M5	M8	F04
20	20	58	75	105	150	18	2	4	14	46	92	26.5	140	11	50	50	M6	M8	F05
25	25	68	85	115	160	18	2	4	14	48	96.5	29	170	14	50	50	M6	M8	F05
32	32	78	100	140	180	18	2	4	18	55.5	103.5	29	170	14	50	50	M6	M8	F05
40	38	88	110	150	200	18	3	4	18	70	123	44	230	17	70	66	M8	M10	F07
50	50	102	125	165	230	18	3	4	18	76	129	44	230	17	70	66	M8	M10	F07
65	64	122	145	185	290	18	3	8	18	104	191	45.5	300	17	102	75	M10	M12	F10
80	76	138	160	200	310	20	3	8	18	119	215	50.5	400	22	102	75	M10	M12	F10
100	100	158	180	220	350	20	3	8	18	136	230	51	400	27	102	102	M10	M12	F10

(Unit:mm)



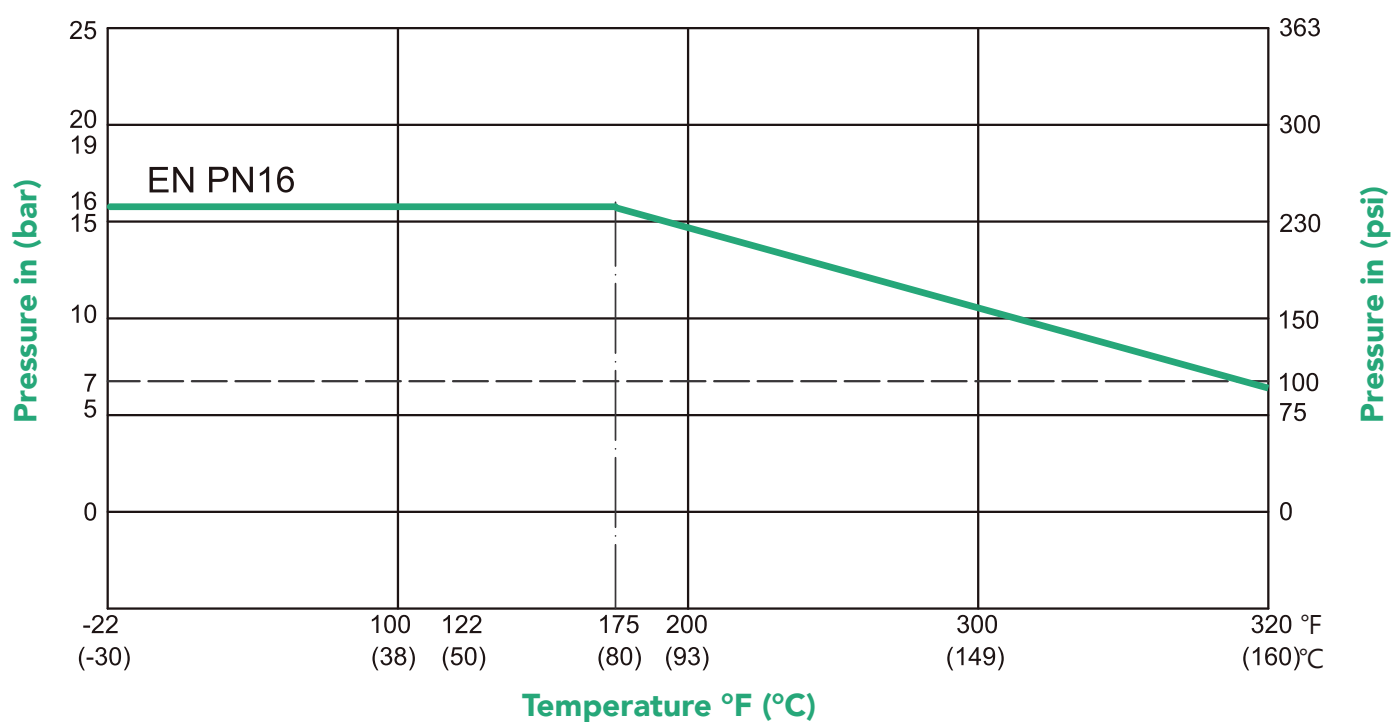


No.	Part	Material
1	Body	1.0619/WCB+PFA
2	End Cap	1.0619/WCB+PFA
3	Ball	1.4308/CF8 /+PFA
4	Stem	304+PFA
5	Ball Seat	PTFE / TFM1600
6	Bolting	A193-B7/8.8
7	Gland	CF8
8	Flat Washer	304
9	Hex Bolting	A2-70
10	O-Ring	FKM
11	Triangle Stopper	304
12	Snap Ring	304
13	Handle (NPS 1/2~2)	CF8
14	Binding Screw (NPS 1/2~2)	A2-70
15	Stem Packing	PTFE / TFM1600
16	Handle Sleeve	VINYL PLASTIC
17	Bolt Nut	A194-2H/8

Availability	
Pressure Rating	ASME Class 150
	DIN PN16
Temperature Range	-29°C ~ +160°C
Size Range	1/2" ~4"/DN15~DN100

Application
Good performance for corrosive media mainly in:
Acetic Acid
Brine
Bromine
Chlorine
Hydrochloric Acid
Phosphoric Acid
Nitric Acid
Seawater
Sulfuric Acid





Cv-Value

Size	NPS	1/2	3/4	1	1 ¼	1 ½	2	2 ½	3	4	5	6
	DIN	15	20	25	32	40	50	65	80	100	125	150
Cv-Value		30	55	96	170	270	470	780	1150	2100	3500	5000

Torque Figure

Close to Open Torque at Various Differential Pressure (P), Standard Seats (PTFE / TFM1600)

Size	NPS DIN		1/2	3/4	1	1 ¼	1 ½	2	2 ½	3	4	5	6
			15	20	25	32	40	50	65	80	100	125	150
ΔP	5bar	N·m	6	8	12	16	20	30	60	70	100	210	300
	75psi	lb·in	53	71	106	142	177	266	531	620	885	1858	2655
	10bar	N·m	6	8	12	20	24	35	65	80	122	240	350
	150psi	lb·in	53	71	106	177	213	410	576	708	1080	2124	3097

Remarks:

1. The torque figures at 5 bar pressure are maximum values to be tested after the valves are placed for 24hours.
2. For actuator sizing, a safety factor of minimum 30% is recommended.

