

## ANSI Flanged Ball Valve

## Type AF95D



ANSI Flanged ball valve, type AF95D, class 150, 2pc. body design, full port, stainless steel casting A351 CF8M or carbon steel casting A216 WCB, seals PTFE re-inforced, connection flanges acc. to ASME B16.5 RF, face-to-face dimension acc. to ASME B16.10, suitable for direct mounting, anti-static, blow-out proof stem, pressure relieving seats in SRS- system, double seal system - Fire-Safe certified and FDA conformity at the same time, TA-Luft tested, modular construction with interesting options.

Type	Pressure class	Materials		Connection acc. to	Face-to-face	Sizes
AF95D	cl.150	Carbon steel	A216 WCB	ASME B16.5 RF	ASME B16.10	1/2" - 6"
AF95D	cl. 150	Stainless steel	A351 CF8M	ASME B16.5 RF	ASME B16.10	1/2" - 6"


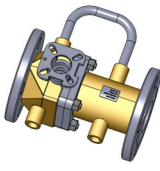






PED / TA-Luft

### Modular construction



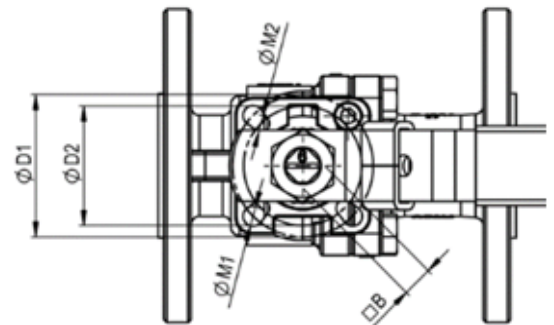
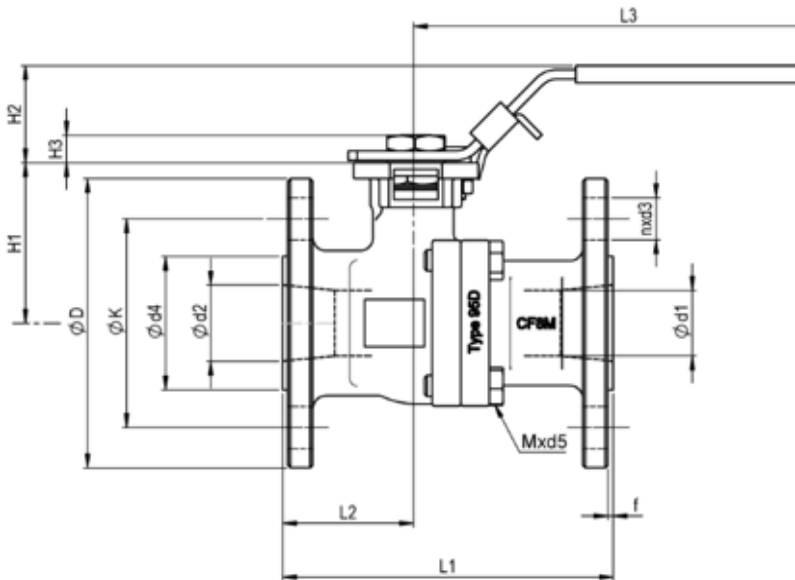
### Options

Cavity fillers	Heating jacket	RTJ- flanges	Different seat materials	Free of oil and grease	Assembly with gearbox
					

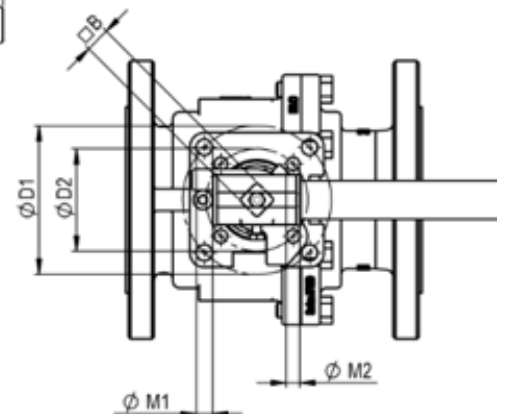
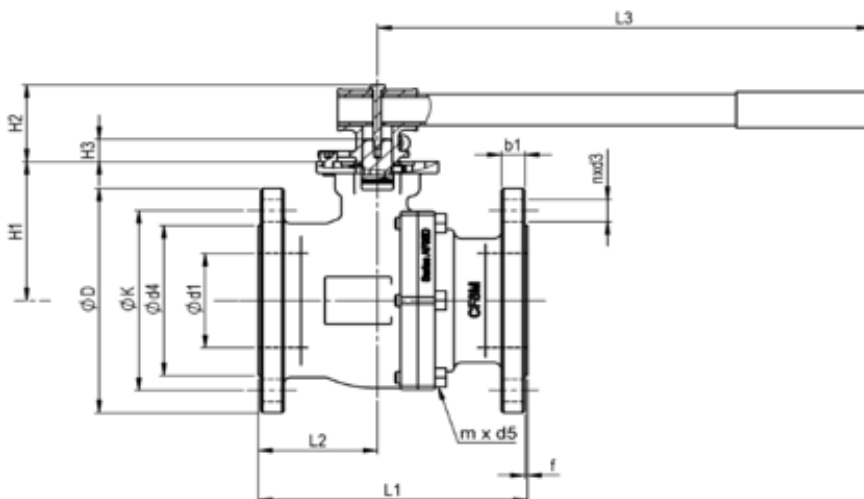
**ANSI Flanged Ball Valve**

**Type AF95D**

Sizes 1/2" to 2"



Sizes 2 1/2" to 6"



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## ANSI Flanged Ball Valve

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Dimension table for AF95D cl.150

Size	Ø d1	Ø d4	Ø D	n x d3	Ø K	f	b1	H1	H2	H3	m x d5	Weight
1/2"	15	34.9	90	4 x 15.875	60.3	2	9.6	47	40	10	4 x M8x20	1.8
3/4"	20	42.9	100	4 x 15.875	69.9	2	9.6	52.5	40	9	4 x M8x25	2.2
1"	25	50.8	110	4 x 15.875	79.4	2	9.6	61	40	11	4 x M8x25	3.0
1 1/4"	32	63.5	115	4 x 15.875	88.9	2	11.2	70	40	11	4 x M8x25	4.2
1 1/2"	38	73	125	4 x 15.875	98.4	2	12.7	79	47	15	4 x M10x30	5.7
2"	50	92.1	150	4 x 19.05	120.7	2	14.3	88	47	15	4 x M12x30	8.7
2 1/2"	65	104.8	180	4 x 19.05	139.7	2	15.9	110	60	19	6 x M10x30	12.2
3"	80	127	190	4 x 19.05	152.4	2	17.5	118	60	19	6x M10x30	17.5
4"	100	157.2	230	8 x 19.05	190.5	2	22.3	134	60	19	6 x M10x30	29.4
5"	-	-	-	-	-	-	-	-	-	-	-	-
6"	Coming soon											

### Starting torques in Nm

(for lubricating media, Δ p 10 barg,  
without additional safety factor)

Size	Ø D1 mm	Ø D2 mm	M1 mm	M2 mm	B mm	L1 mm	L2 mm	L3 mm	Kv- Value
1/2"	42	36	6	6	9	108	44.5	170	23
3/4"	42	36	6	6	9	117	44.5	170	52
1"	50	42	7	6	11	127	51.3	170	97
1 1/4"	50	42	7	6	11	140	56.0	170	163
1 1/2"	70	50	9	7	14	165	62.5	230	229
2"	70	50	9	7	14	178	70.1	230	429
2 1/2"	102	70	11	9	17	190	87.0	370	642
3"	102	70	11	9	17	203	90.0	370	992
4"	102	70	11	9	17	229	103.0	450	1815
5"	-	-	-	-	-	-	-	-	-
6"	Coming soon								

Size	Seat materials		
	PTFE virgin	PTFE re-inforced	PTFE carbon
1/2"	12	12	14
3/4"	13	13	16
1"	17	18	23
1 1/4"	24	25	30
1 1/2"	43	45	54
2"	55	58	69
2 1/2"	60	63	75
3"	88	92	110
4"	106	111	133
5"	-	-	-
6"	follow up	follow up	follow up

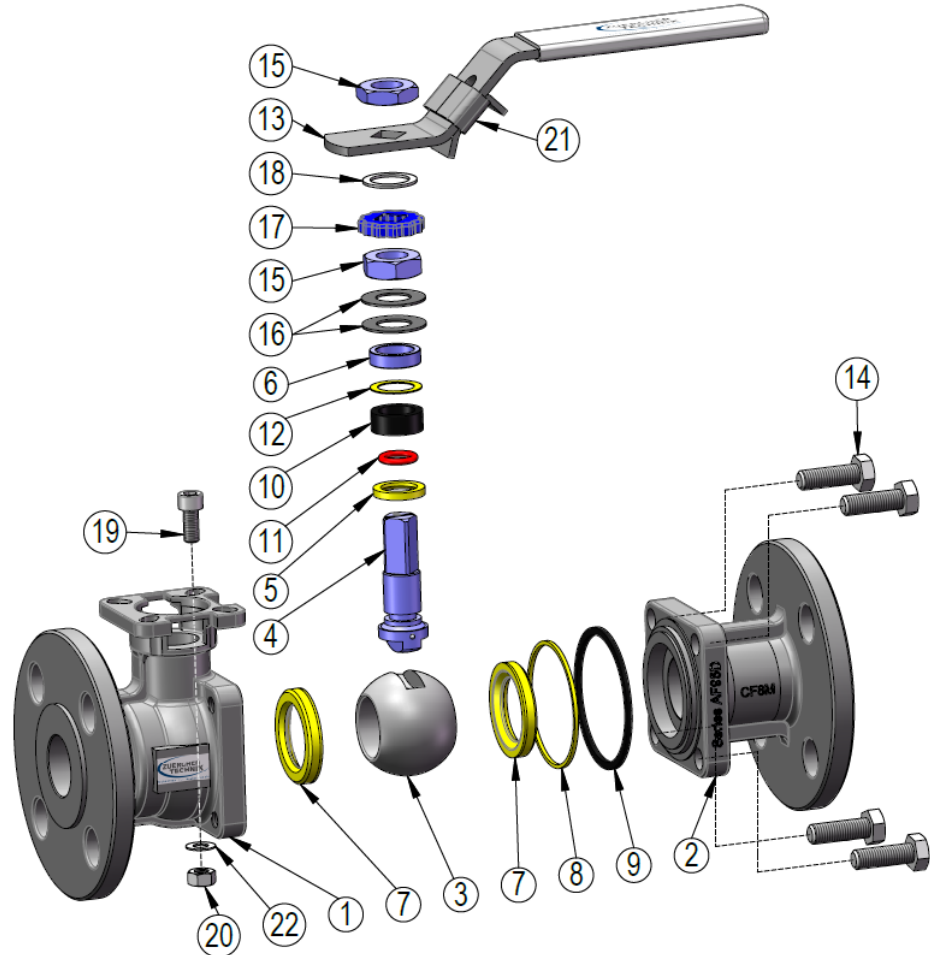
The starting torque is considerably influenced by the number of operation cycles! The shown values are averages. If non-lubricating medias are used an increase of the values have to be considered!

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**ANSI Flanged Ball Valve**

**Type AF95D**

Sizes 1/2" to 2":



Item Nr.	Description	Material	Sealing kit Spare part
1	Body part	A351 CF8M / A216 WCB	
2	Flange part	A351 CF8M / A216 WCB	
3	Ball	A182 316	
4	Stem	A182 316	
5	Stem seal	PTFE	X
6	Pressure ring	A182 316	
7	Seat ring (1x „SRS“)	RPTFE (*)	X
8	Body sealing (wetted part)	PTFE	X
9	Body sealing (atmospheric)	Graphite	X
10	Stem packing	Graphite	X
11	O-Ring	FKM/NBR/FEP	X
*	acc. to sealing configuration		

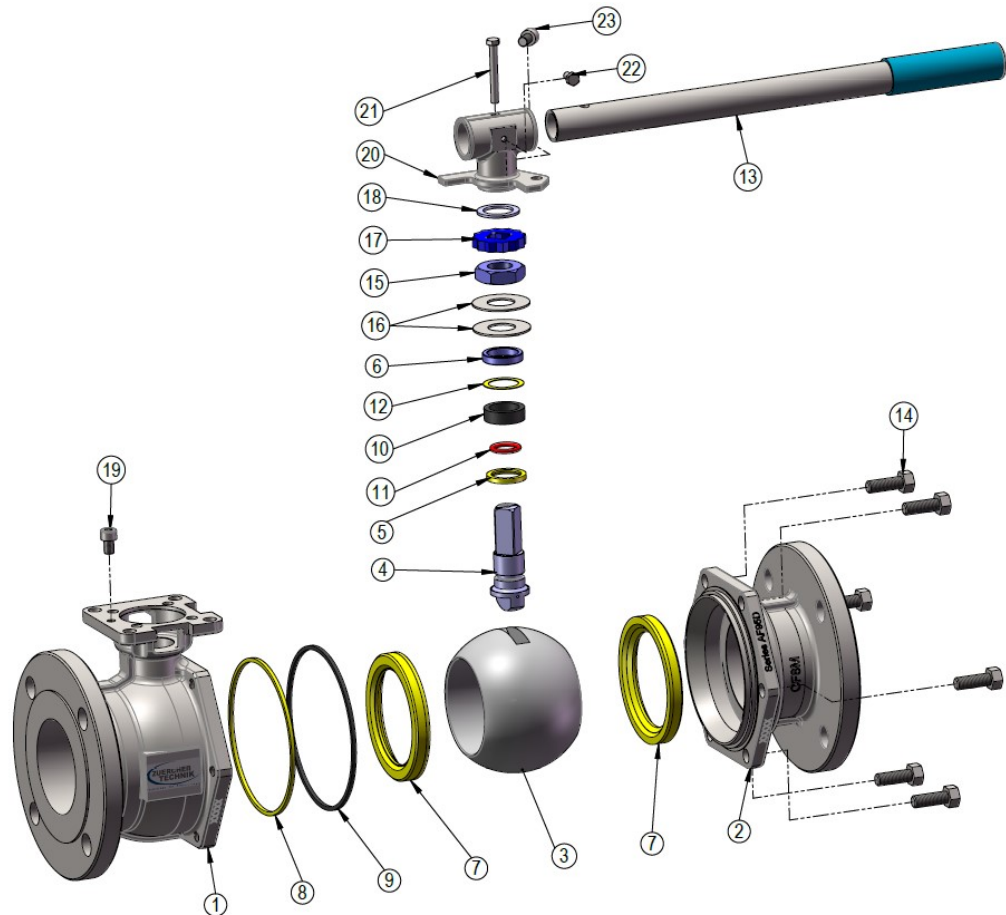
Item Nr.	Description	Material	Sealing kit Spare part
12	Slide ring	PTFE	X
13	Lever	A182 304/ PVC	
14	Body screws	A2-70	
15	Stem nut	A182 304	
16	Belville spring washer	A182 304	
17	Safety cap	A182 304	
18	Distance washer	A182 304	
19	Cylinder head screw (lock)	A182 304	
20	Hexagon head screw to item nr. 19	A182 304	
21	Locking device	A182 304	
22	Distance washer to item nr. 19	A182 304	

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**ANSI Flanged Ball Valve**

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Sizes 2 1/2" to 6":



Item Nr.	Description	Material	Sealing kit Spare part
1	Body part	A351 CF8M / A216 WCB	
2	Flange part	A351 CF8M / A216 WCB	
3	Ball	A182 316	
4	Stem	A182 316	
5	Stem seal	PTFE	X
6	Pressure ring	A182 316	
7	Seat ring (1x „SRS“)	RPTFE (*)	X
8	Body sealing (wetted part)	PTFE	X
9	Body sealing (atmospheric)	Graphite	X
10	Stem packing	Graphite	X
11	O-Ring	FKM/NBR/FEP	X
*	acc. to sealing configuration		

Item Nr.	Description	Material	Sealing kit Spare part
12	Slide ring	PTFE	X
13	Lever	A182 304/PVC	
14	Body screws	A2-70	
15	Stem nut	A182 304	
16	Belville spring washer	A182 304	
17	Safety cap	A182 304	
18	Distance washer	A182 304	
19	Cylinder head screw (lock)	A182 304	
20	Adapter	A351 CF8M	
21	Hexagon head screw	A182 304	
22	Hexagon head screw	A182 304	
23	Cylinder head screw	A182 304	

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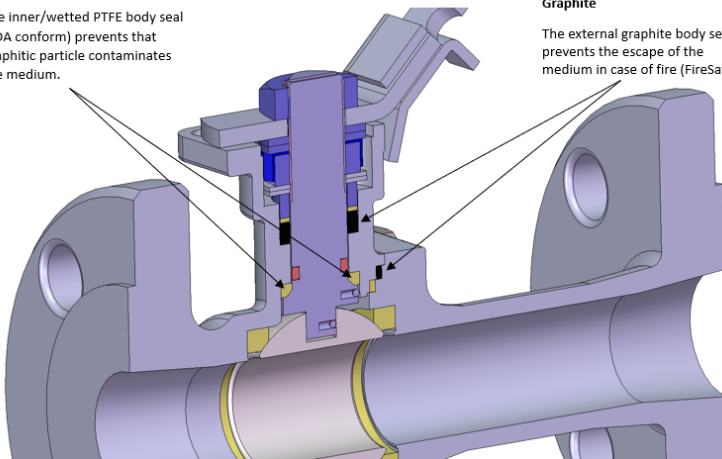
**Our double seal system**

**PTFE**

The inner/wetted PTFE body seal (FDA conform) prevents that graphitic particle contaminates the medium.

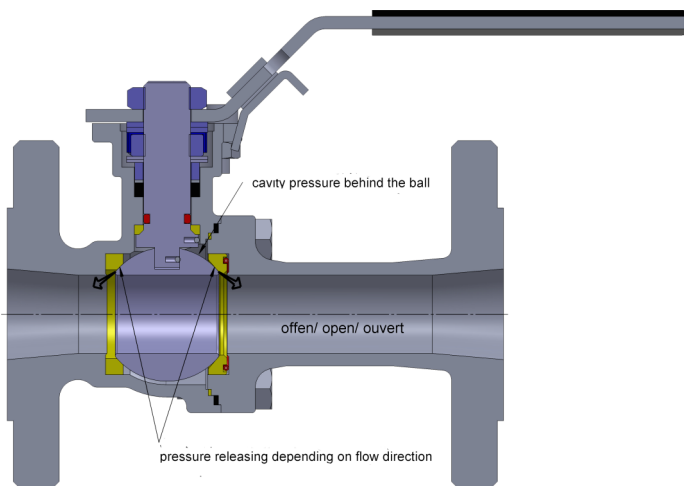
**Graphite**

The external graphite body seal prevents the escape of the medium in case of fire (FireSafe).

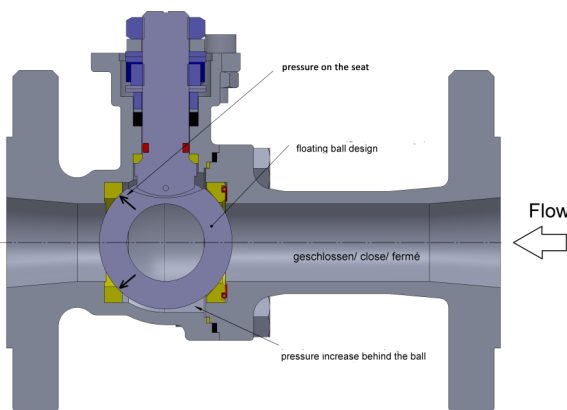


The double seal system enables the valve to comply with Fire-Safe and FDA standards at the same time. A solution particularly for chemistry and pharma which offers increased safety.

**Our pressure relieving system SRS**



The pressure relieving system safely discharges overpressure behind the ball and prevents damage to the sealing system. One of the two seat rings is equipped with a FEP-coated O-ring which acts as a spring element. This spring action gives way at correspondingly high differential pressure and relieves overpressure. Pressure behind the ball is locked in. A pressure increase is also possible in open ball position.



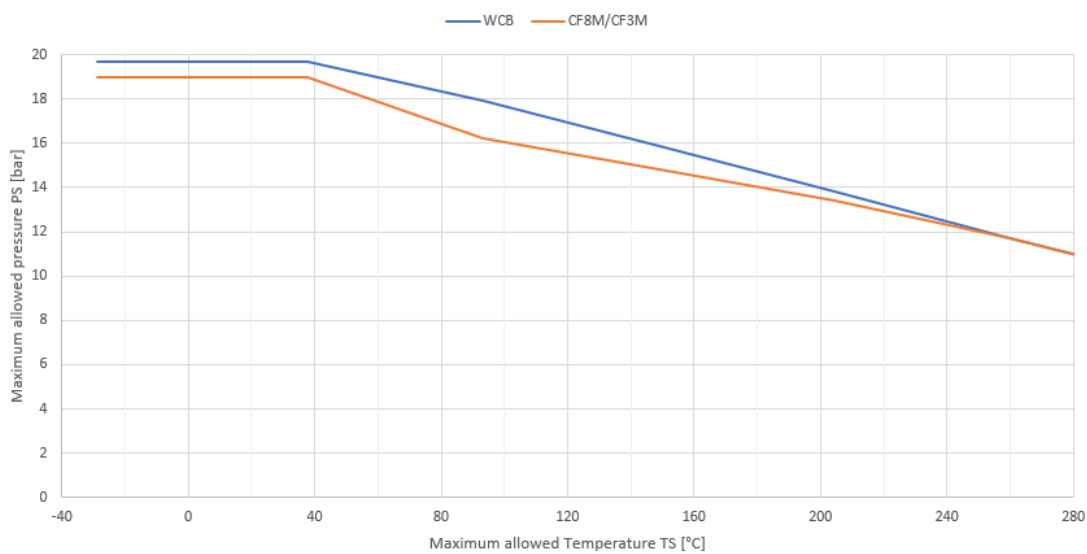
In closed position, the pressure is locked behind the ball. Existing process conditions can increase the pressure behind the ball (hot media, high ambient temperature, etc.). The pressure increase of the locked media will be relieved via the spring acting seat ring.

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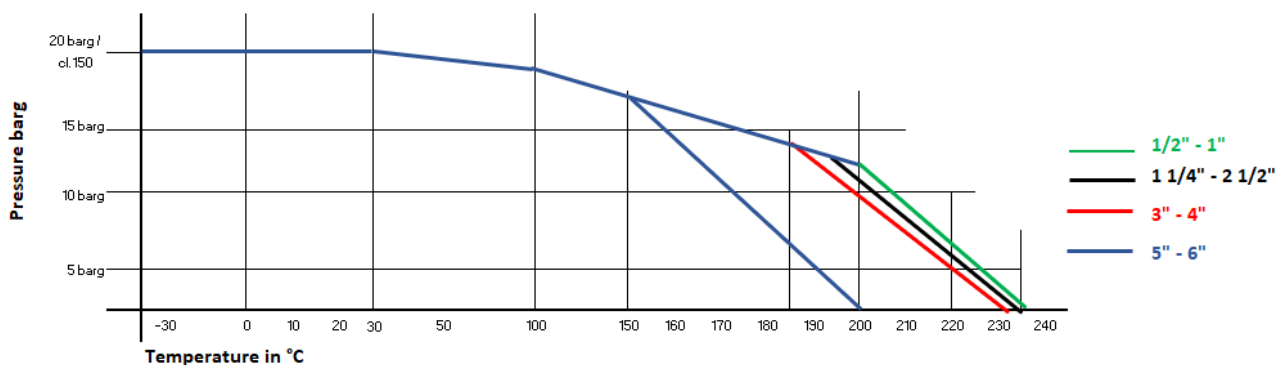
**Type AF95D**

**Pressure- Temperature rating for flanges - ANSI class 150 acc. to ANSI B16.5**

Allowable temperature TS		38 °C	93 °C	149 °C	204 °C	260 °C
Allowable pressure PS in barg	A216 WCB	19.7	17.9	15.9	13.8	11.7
	A351 CF8M	19.0	16.2	14.8	13.4	11.7



**Pressure / Temperature chart acc. ASME cl.150  
acc. to sealing configuration  
Sample: Seat made of RPTFE (PTFE+15% glas)**

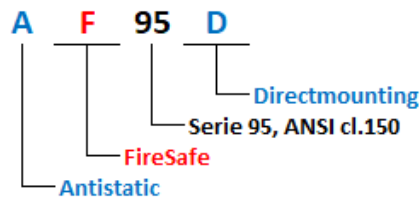


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**ANSI Flanged Ball Valve**

**Type AF95D**

**Article codification / Identification :**



Code 1	Body material, Type
9	Stainless steel, CF8M, Type AF95D
09	Carbon steel, WCB, Type AF95D

Code 2	Face to Face dimension
5	acc. to ANSI/ASME B16.10

Code 3		Sizes
DN	Full bore	
15 - 1/2"	015	
20 - 3/4"	020	
25 - 1"	025	
32 - 1 1/4"	032	
40 - 1 1/2"	040	
50 - 2"	050	
65 - 2 1/2"	065	
80 - 3"	080	
100 - 4"	100	
125 - 5"	—	
150 - 6"	150	

Remark	
X	other body materials and/or other pressure rates on request

Code 4	Design / Pressure class
150	Standard— ANSI class 150
X	Special


Code 5 Sealing configuration / Sealing material specification					
	Description	Seat ring	Body sealing (wetted / outside)	Stem packing	Stem seal
C3*	CRCR	PTFE+25% carbon	PTFE+15% glas / Graphite	PTFE+25% carbon	PTFE+15% glas
P	PRCR	PEEK© virgin	PTFE+15% glas / Graphite	PTFE+25% carbon	PTFE+15% glas
R3*	RRCR	PTFE+15% glas	PTFE+15% glas / Graphite	PTFE+25% carbon	PTFE+15% glas
T4	TRCR	PTFE virgin	PTFE+15% glas / Graphite	PTFE+25% carbon	PTFE+15% glas
X	Special				
*	Standard with pressure relieving seat „SRS“				

Code 6	Options
DA	Pressure relief whole between ball and stem
FO	Free of oil and grease
HM	Heating jacket
X	Special

**Sample:**

Ball valve, type AF95D, size 2", cl.150 RF, CF8M, seat rings in PTFE/15% glas

Code 1	Code 2	Code 3	Fix	Code 4	Code 5	Code 6
9	5	050	D.	150	R3	-



Remark: further adders at Article Nr.(z.B. ...comp.z...) are needed acc. to internal system

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