

SPHERON9® SP Heavy-Duty Lined Ball Valve

Flanged full-bore ball valve PFA-lined, PN 10-PN 16/Class 150

Applications

The GFT9 lined full-bore ball valve **SPHERON9® SP** is ideally suited for highly corrosive or abrasive application, where superior performance, tight shut-off and constant torque at almost no maintenance are required.

Thanks to its wide range of optional linings it is suitable to handle a multitude of corrosive applications across a large variety of industries like chemical, fine-chemical, pharmaceutical, petro-chemical, pulp & paper and mining.

The **SPHERON9® SP** has proven its superior performance as on/off, control or throttle device for fluids in liquid or gas form. Face to face dimensions are available in both DIN and ANSI standard.

The standard design with hand lever can also be equipped with stem extension, heating jacket or lockable hand lever.

Optionally it can be delivered for actuation, with positioner, gear box a.s.o.

Full bore offers high cv values equal to the pipe

Low torque as to compared to plug valves

Min. 3,5mm thick lining
option:
5mm thickness

High permeation resistant virgin PFA lining

Hysteresis free one piece ball-stem design, ideal for actuation

Blow out safe shaft design

Almost metal to metal contact - high, maintenance free tightness

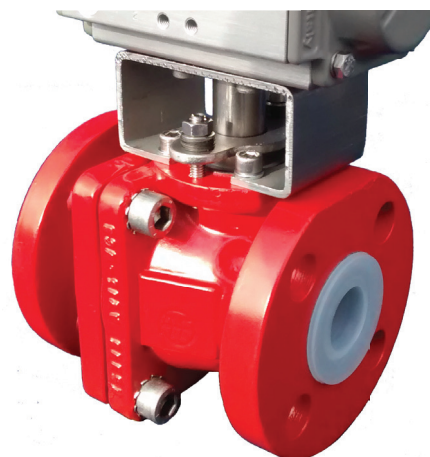
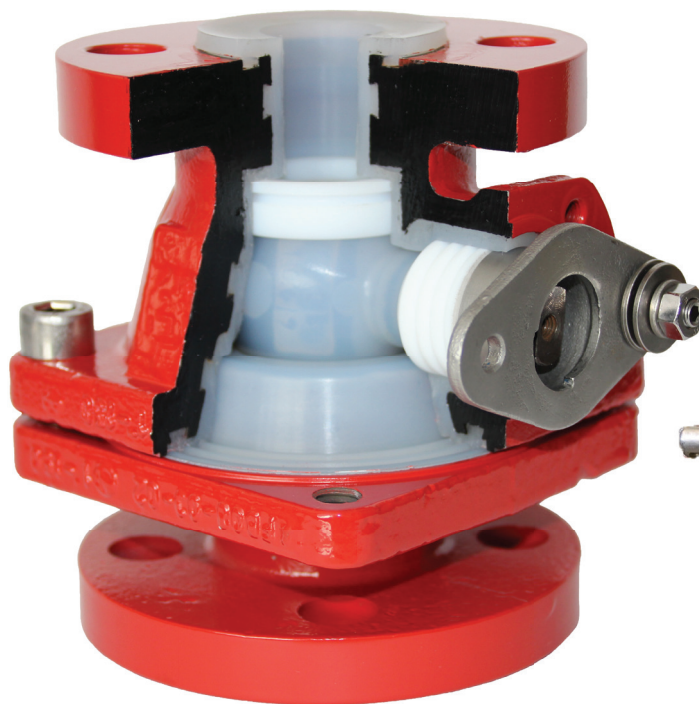
Locked in lining permits vacuum applications

TA-Luft compliant gas tight self-adjusting packing, leakage rate A acc. EN 12266

Lockable hand lever as option

Stem extension for insulated pipings as option

Abrasion resistant options available



Body lining materials:

PFA, Antistatic PFA/AS, Ultrapure PFA/UP, FEP, PVDF, UHMW-PE, Ceramic

Ball materials:

PFA, Antistatic PFA/AS, Ultrapure PFA/UP, FEP, PVDF, UHMW-PE, Ceramic

Pressure range:

Full vacuum up to 16bar

Temperature range:

-60°C up to +200°C

Flange dimensions:

DIN EN 1092-1, PN 16
ASME/ANSI B 16.5 Cl. 150
JIS 10K

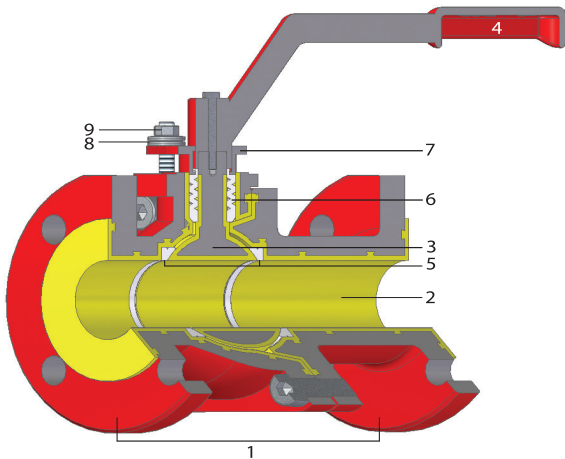
Face to face dimensions:

DIN EN 558-1
ASME B 16.10-Class 150

Actuator connection:

DIN 3337-ISO 5211

Parts List



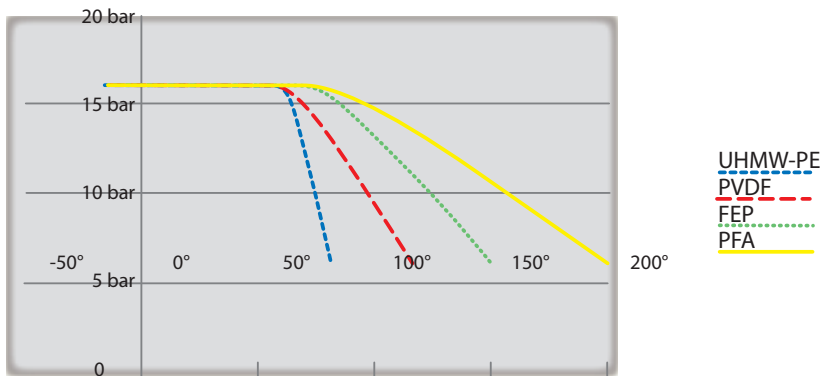
Pos.	Item	Material
1	Body	1.0619 (A216 WCB), 1.4408 (CF-8M)
2	Lining Body/Ball	PFA, FEP, PFA/AS, PFA/UP, PVDF, UHMW-PE*
3	Ball/Stem	1.0619 (A216 WCB), 1.4408 (CF-8M)
4	Lever	1.0619 (A216 WCB), 1.4408 (CF-8M)
5	Seat Rings	PTFE/TFM, PTFE/AS, GF PTFE, o. o. req. *2
6	Bellow Packing	PTFE/TFM, PTFE/AS
7	Packing Gld Follower	1.0619 (A216 WCB), 1.4408 (CF-8M)
8	Spring Gld Follower	Spring Steel
9	Bolts and Nuts	Stainless Steel A2, A4, 5.6, o. o. req.

* Ball options: 1 piece ball stem, 2 piece ball stem, V-control ball, Cavity free TF ball, SiC ball, Al₂O₃ ceramic ball

*2 Abrasion resistant seat ring materials on request

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Pressure-Temperature-Diagram



Dimensions, cv values, Torques and Weights

SPI	øD	øk	ød	n x øB	H ₁	L ₁	L ₂	L _H	kvs	T*2	Kg
15	95	65	48	4 x ø14	126	130	58.5	180	17.5	8	5.0
20	105	75	58	4 x ø14	126	150	58.5	180	30	8	6.0
25	115	85	68	4 x ø14	126	160	52	180	75	12	6.5
32	140	100	78	4 x ø18	126	180	60	180	140	18	9.0
40	150	110	88	4 x ø18	200	200	67.5	270	200	20	130
50	165	125	102	4 x ø18	200	230	80	270	310	25	16.0
65	185	145	122	8 x ø18	220	290	77.5	380	615	50	28.0
80	200	160	138	8 x ø18	260	310	85.5	380	800	60	36.0
100	220	180	158	8 x ø18	270	350	94	380	1250	80	56.0
125	250	210	188	8 x ø18	*	400	124	*	*4	210	85.0
150	285	240	212	8 x ø22	*	360*3	124	*	2800	250	98.0
200	343	295	268	12 x ø22	*	600	200	*	6000	600	175.0
SPA											
1/2"	95	60.4	45	4 x ø15.8	126	108	55	190	17.5	8	5.0
1"	105	79.4	60	4 x ø15.8	126	127	55	190	17.5	12	6.0
1 1/2"	115	98.4	88	4 x ø15.8	200	165	65	275	200	20	11.0
2"	150	120.7	100	4 x ø19	200	178	80	275	310	25	13.0
3"	165	152.4	130	4 x ø19	260	203	85	300	800	60	32.0
4"	200	190.5	150	8 x ø19	270	229	95	300	1250	80	48.0
6"	220	241.3	210	8 x ø22.5	*	267	125	300	2800	250	86.0
8"	343	298.5	250	8 x ø22.5	*	457	*	*	5800	600	165.0
10"	406	362.0	330	12 x ø25.4	*	533	*	*	8900	*4	210.0

* Gearbox recommended

*2 Torque in Nm at Δp 6bar for PFA ball, Al₂O₃ ball on request

*3 Alternative length 480mm

*4 On request

Dimensions of other sizes and other data/dimensions on request

