

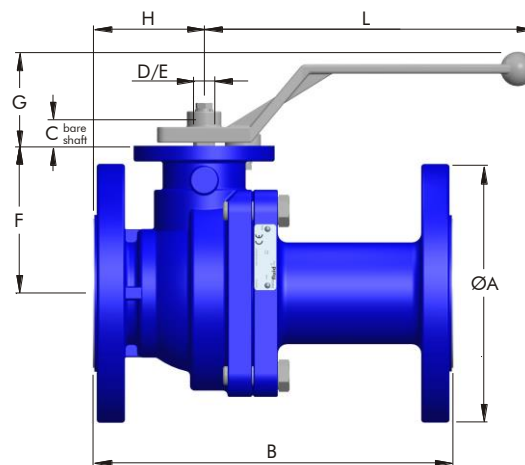
## 1/2" - 4" full port, ceramic ball

### Operating Conditions

- Temperature range from -40°F up to +300°F, depending on lining material
- Pressure range from 0.01 psi up to 232 psi, depending on size/pressure/temperature

### Manual Valve

Standard version with handle/lever

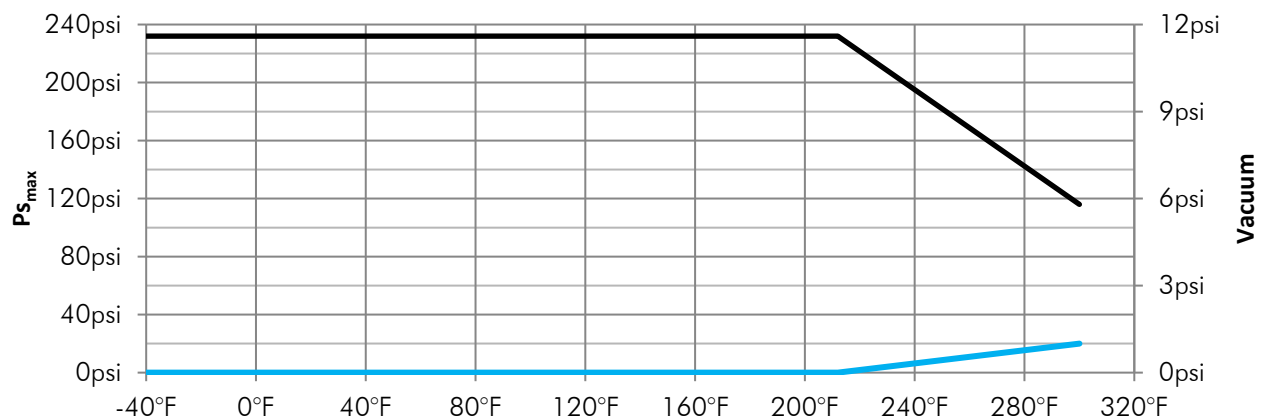


### Dimensions inch

Size	ØA	B	C	D (dia.)	E (DD)	F	G	H	L	ISO	Weight lbs	
											valve	lever
1/2"	3.75	5.125	0.75	0.551	0.433	2.52	2.28	1.97	6.34	F05	7.92	0.7
3/4"	4.15	5.90	0.75	0.551	0.433	2.60	2.28	1.97	6.34	F05	9.9	0.7
1"	4.25	5.0	0.75	0.551	0.433	2.75	2.28	1.97	6.34	F05	10.78	0.7
1 1/2"	5.0	6.50	0.75	0.551	0.433	3.43	2.28	2.52	8.3	F07	18.92	0.79
2"	6.0	7.0	0.75	0.551	0.433	3.70	2.28	2.8	8.3	F07	24.86	0.79
3"	7.5	8.0	0.91	0.709	0.551	4.53	2.44	3.19	9.88	F07	40.92	0.9
4"	9.00	9.00	0.91	0.94	0.67	5.12	2.44	3.62	12.56	F10	67.9	1.98

Face to face B acc. to ASME B16.10

### Pressure-/Temperature Diagram



Low temperature or austenitic steels are required for use below 14°F operating temperature.

**Torque Values** in-lbs

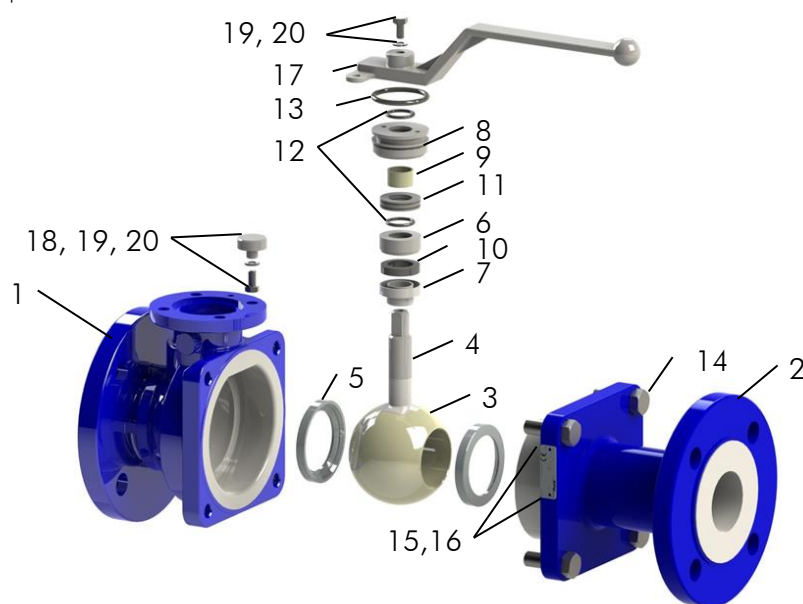
Max. torque values for PFA-encapsulated balls and PFA-lined bodies

Size nom.	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
Torque nom.	71	71	106	204	266	575.25	841
max. allow.	212	212	319	620	797	1770	2655

- Stated values to be break-away torques without any consideration of safety factors (min. 1.3) for pneum. actuators.

**Standard Version** (Picture showing Valve DN50 PN16 WCB, PFA-lined, ceramic ball, ETFE-encaps. shaft, with handle)

Parts List Manual Valve compl.



Item	Qty.	Description	Material Description	Material No. DIN 17440/41
1	1	Body Half Left, lined, RAL 5005	WCB/PFA	1.0619
2	1	Body Half Right, lined, RAL 5005	WCB/PFA	1.0619
3	1	Ball solid	Ceramic	
4	1	Shaft, encapsulated	Duplex/ETFE	1.4462
5	2	Ball Seat	PTFE	
6	1	Pressure Sleeve	SS316L	1.4404
7	1	Sealing Sleeve	PTFE	
8	1	Threaded Bushing	SS316L	1.4404
9	1	Bearing	C.Steel/PTFE	
10	1	Elastomer Insert	VMQ	
11	4	Belleville Spring	Spring Steel	1.8159
12	2	O-Ring	FPM	
13	1	O-Ring	FPM	
14	4	Hex. Head Cap Screw	A2-70	1.431
15	1	Name Plate 42 x 14 CE	A2	1.4301
16	2	Hammer Screw 2.49 x 4.76	A2	1.431
17	1	Handlever	SS304	1.4308
18	1	Stop	SS316L	1.4404
19	2	Hex. Head Cap Screw	A2-70	1.431
20	2	Lock Washer	SS304	1.431