



PN16 Flanged Stainless Ball Valve with Plastic Valbia Electric Actuator

Main VALBIA Plastic electric actuator features:

- Corrosion resistant technopolymer housing
- V0 Self extinguishing housing
- Fully weatherproof smart industrial actuator.
- ISO5211 - DIN3337 Painted aluminium valve connection
- Emergency manual override facility.
- Thermostatic anti-condensation heater.
- Electronic torque limiter.
- End of travel switches for remote open/ closed indication.
- CE marked.
- EU manufactured by Valbia.

Applications:

Potable water (but not WRAS approved), oil, air and most non-corrosive media, subject to compatibility with wetted parts in contact with media.

Valbia Actuators sized on a maximum differential pressure of 10 bar wet service, operated at least once per day. If the intended duty differs from these parameters, or is dry (air or gas) call to check valve actuator sizing as a larger output electrical actuator may be required.

Maximum working temperature of a direct mounted assembly is +55C. For higher working temperatures, consider models that have a mounting kit between the valve and actuator which uses air cooling to dissipate the rising heat from the valve away from the actuator. Should the Valbia electric actuator see more than +55C it will malfunction.

How this electric 1/4 turn valve works (on-off):

Electrically operated valves are driven by a motor and gearbox. On receipt of a continuous voltage signal the motor runs and, via a gearbox in the Valbia electric actuator, rotates the valve stem. The motor stops at the desired position (usually 0° or 90°) by internal cams striking micro-switches. The smart valve actuator remains in this position, with the voltage still applied continuously, until switched and a continuous voltage reversing signal is applied, which runs the motor in the opposite direction, reversing the rotation until separate set of internal cams strike separate set of micro-switches.

Specifications:	
Actuator housing	Technopolymer
Supply voltage range	24V AC or DC, or 110V, or 240VAC
IP Rating	IP67
Actuator temp limits	-10 to +55°C
Assembly temp limits	E4100ES-VB +55°C Direct Mounted E4110ES-VB +110°C Mounted via kit
Valve body	CF8M (Cast 316SS)
Valve ball	316SS
Valve seats	PTFE
Valve Seals	PTFE, Viton, Graphite
Valve Pressure rating	UTI 2" 40 bar, rest 16 bar
Valve temp limits	-20 to +220°C
Size range	1/2" to 4"

Ball valve information:

Full bore 2 piece construction, firesafe certified, anti-static, blow-out proof ball and stem, anti-static, providing full unrestricted flow and a very low pressure drop across the valve. Designed for automation with integrally cast ISO5211 actuator mounting platform. Turning the ball through 90° fully opens the valve, turning back through 90° fully closes the valve and isolates the flow. End connections are flanged PN40 up to 2", PN16 above.

VALBIA Smart Electric Actuator Available Functions: ON - OFF, FAILSAFE & MODULATING

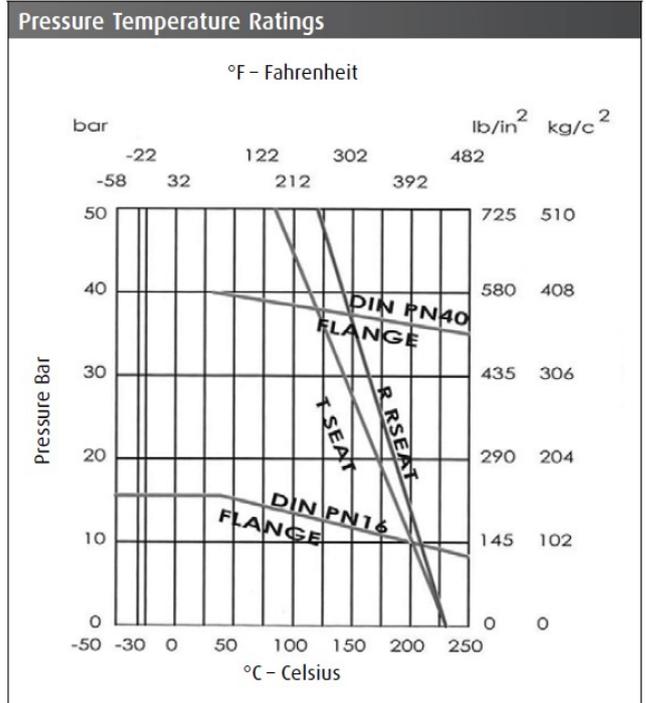
Flanged PN16/40, Full Bore, Stainless Steel Body, Ball & Stem, PTFE Seats & Seals, Anti-Blowout Stem, Anti-Static Device, Firesafe Certified, ISO Topworks for Actuation.



Pressure/Temperature

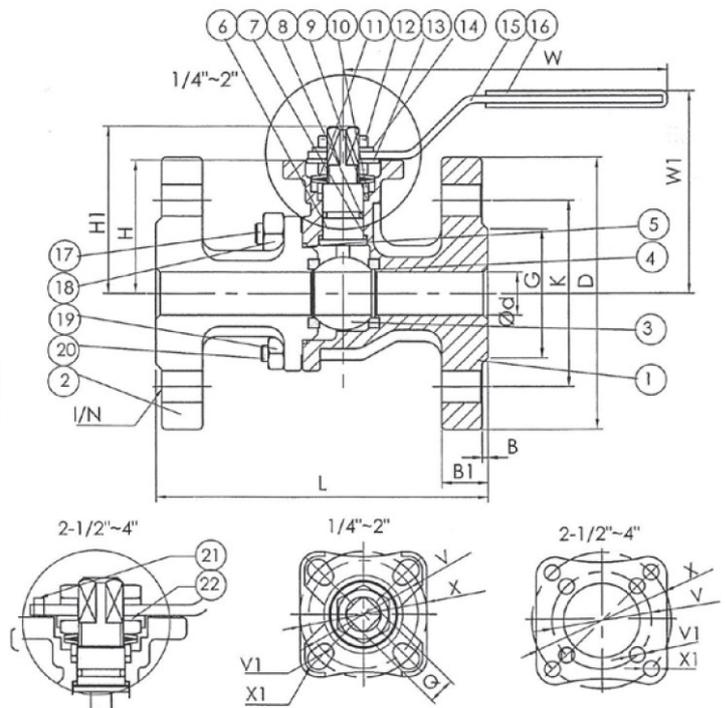
Pressure	PN16/PN40 Rated
Temperature	-20°C to 220°C

Note: Flanged PN40 upto 2", Flanged PN16 2½" to 4"

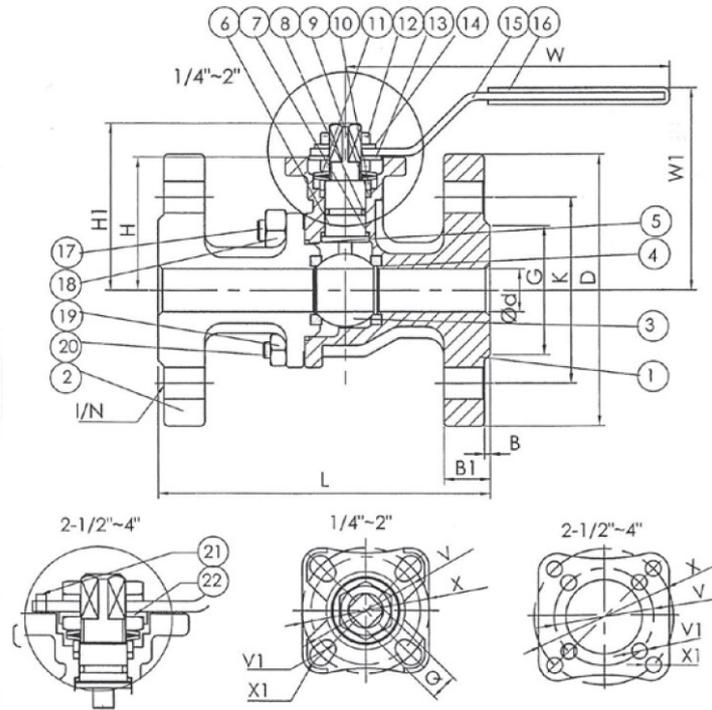


Material List

No.	Parts	Qty.	Materials
1	Body	1	ASTM-A351-CF8M
2	Cap	1	ASTM-A351-CF8M
3	Ball	1	ASTM-A351-CF8M
4	Ball Seat	2	15% R-PTFE
5	Joint Gasket	1	PTFE
6	Stem	1	AISI 316
7	Thrust Washer	1	15% R-PTFE
8	O-Ring	1	Viton
9	Stem Packing	1	PTFE
10	Stem Ring	1	AISI 304
11	Belleville Washer	2	AISI 304
12	Stem Nut	2	AISI 304
13	Stopper	1	AISI 304
14	Spring Washer	1	AISI 304
15	Handle	1	AISI 304
16	Plastic Cover	1	Plastic
17	Nut*1	1	AISI 304
18	Stud Bolt*1	1	AISI 304
19	Nut*2	3.5.7	AISI 304
20	Stud Bolt*2	3.5.7	AISI 304
21	Stop Pin	1	AISI 304
22	Lock Washer	1	AISI 304



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Dimensions		DIN-PN16						L	H	H1	W	Q	V	V1	X	X1	kg	W1	Torque NM	KG
Size	od	G	K	D	B	B1	I/N													
1/2"	15	49.0	65	95	2	16	14	115.0	46.5	56.0	110	9	42	6.0		2.2	89.0	4~5	2.17	
3/4"	20	59.0	75	105	2	18	14	120.0	51.5	61.0	110	9	42	R3.5	50	R3.5	2.6	94.0	6~8	3.03
1"	25	69.0	85	115	2	18	14	125.0	57.5	67.0	136	11	42	R3.0	50	R3.5	3.65	95.0	8~10	3.79
1 1/4"	32	80.5	100	140	2	18	18	127.3	71.5	87.0	175	14	50	R3.5	70	R4.5	6.15	105.7	12~14	5.72
1 1/2"	40	89.5	110	150	3	18	18	140.0	76.5	92.0	203	14	50	R3.5	70	R4.5	6.85	110.7	18~20	6.94
2"	50	103.5	125	165	3	20	18	150.0	83.5	99.0	203	14	50	R3.5	70	R4.5	9.65	117.7	25~30	9.38
2 1/2"	65	123.0	145	185	3	18	18	170.0	118.5	137.0	277.5	17	70	9.0	102	11	15.2	155.5	32~36	14.84
3"	80	140.0	160	200	3	20	18	180.0	129.5	148.0	277.5	17	70	9.0	102	11	19.6	166.5	50~60	18.99
4"	100	160.0	180	220	3	20	18	190.0	145.0	163.5	377.5	17	70	9.0	102	11	27.35	182.0	85~95	26.59