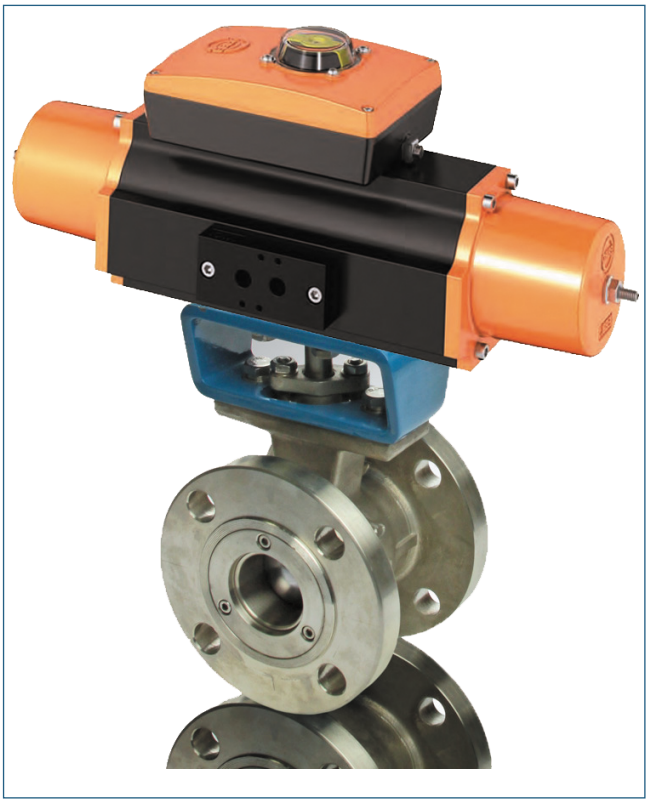
V445 TYPE SEGMENT BALL VALVE



V445 segment ball is in V-notch design with strong cutting forge and self-cleanless, especially suitable for control of medium containing fiber and tiny solids.

TECHNICAL DATA

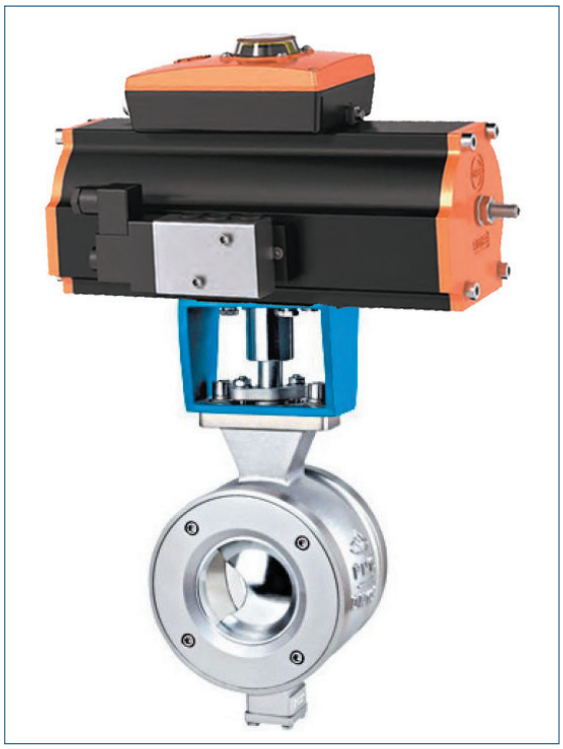
Nominal diameter :Ç	DN 25 - 400
Face to face : Flange accomm. :	EBRO Standard EN 1092 PN10/16/25/40/64 ANSI B16.5 Class 150 , 300 BS 10 Tablo D ve E
Flat flange :	EN 1092-1 Typ1
Neck flange :	EN 1092-1 Typ11
Flange surf. design :	EN1092 Form A-E ANSI RF
Temperature range :	-20 °C to 400 °C (depending on, pressure, medium and material)
Op. pressure :	standard 16 Bar , maks. 64 Bar
Top flange :	EN ISO 5211
Body material :	GSC25 - Steel 1.4408 - Stainless steel 1.4462 - Duplex Stainless Steel
Seat:	R.PTFE - Reinforced PTFE 1.4408 Stainless Steel Stellite Surfacing 1.4408 Stainless Steel Hard Chromium Plating
Ball material :	1.4408 Stainless Steel 1.4408 Stainless Steel Stellite Surfacing 1.4408 Stainless Steel Hard Chromium Plating

PROPERTIES

- V-noctch provides excellent control characteristics for an extensive variety of flow application.
- Excellent sealing with metal or teflon seat options.
- Shearing between ball and seal promotes smooth, non-clogging operation perfect for fiber and slurry application.
- Low cost for valve repair.
- V445 segment valves designed for hard industrial applications with full bore feature.
- Trunnion bearing technology is engineered for excellent abrasion resistance.

GENERAL APPLICATIONS

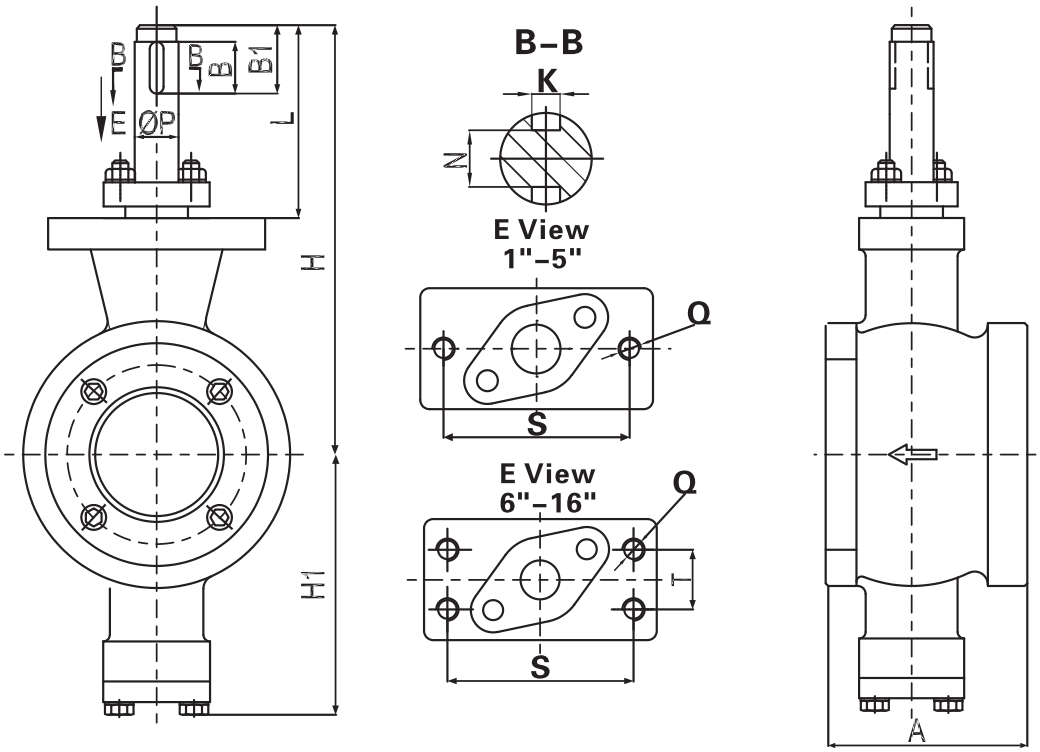
- Paper Industry
- Mining
- Granular fluid processing plants
- Energy and geothermal energy plants
- Chemical and petrochemical industry
- Food and pharmaceutical industry



DN80 Wafer type V445 Segment Valve, Pneumatic actuator

V445 TYPE SEGMENT BALL VALVE

V445 WAFER TYPE SEGMENT BALL VALVE **DIN EN 1092 PN10-25 , ASME Class 150**



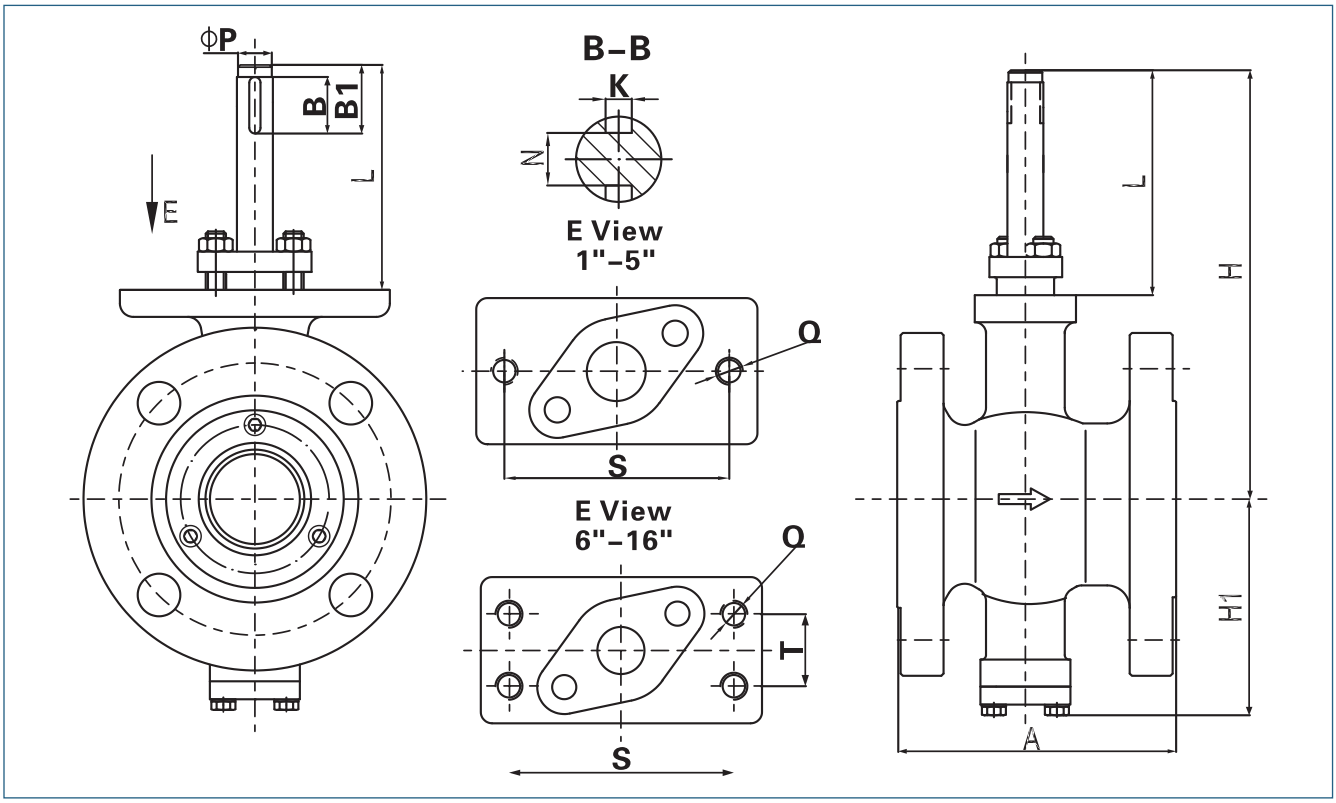
DN [mm]	[inch]	Dimensions A	H	H1	L	P	B1	B	K	N	S	Q	T	Weights kg
25	**1**	102	188	86	110	16	40	35	5	10	80	M10	-	3
32	**$1_{1/4}$**	104	196	86	110	16	40	35	5	10	80	M10	-	4
40	**$1_{1/2}$**	114	196	86	110	16	40	35	5	10	80	M10	-	4
50	**2**	124	211	104	110	16	40	35	5	10	80	M10	-	5
65	**$2_{1/2}$**	145	231	127	120	20	40	35	6	10	80	M10	-	6
80	**3**	165	254	137	120	25	40	35	8	17	90	M12	-	11
100	**4**	193	262	145	120	25	40	35	8	17	90	M12	-	16
125	**5**	213	282	183	133	30	45	40	10	20	100	M12	-	17
150	**6**	229	345	203	145	40	55	50	12	30	110	M12	40	30
200	**8**	244	363	221	145	40	55	50	12	30	110	M12	40	46
250	**10**	297	467	269	193	50	68	60	16	38	130	M12	45	68
300	**12**	337	480	287	193	50	68	60	16	38	130	M12	45	133
350	**14**	391	564	353	210	60	88	80	18	46	134	M16	64	195
400	**16**	480	658	409	248	70	88	80	20	55	175	M24	70	344

* Our range of standart manufacturing is PN16- 40.

Subject to change without notice.

V445 TYPE SEGMENT BALL VALVE

V445F FLANGED TYPE SEGMENT BALL VALVE **DIN EN 1092 PN40-64 , ASME Class 300**



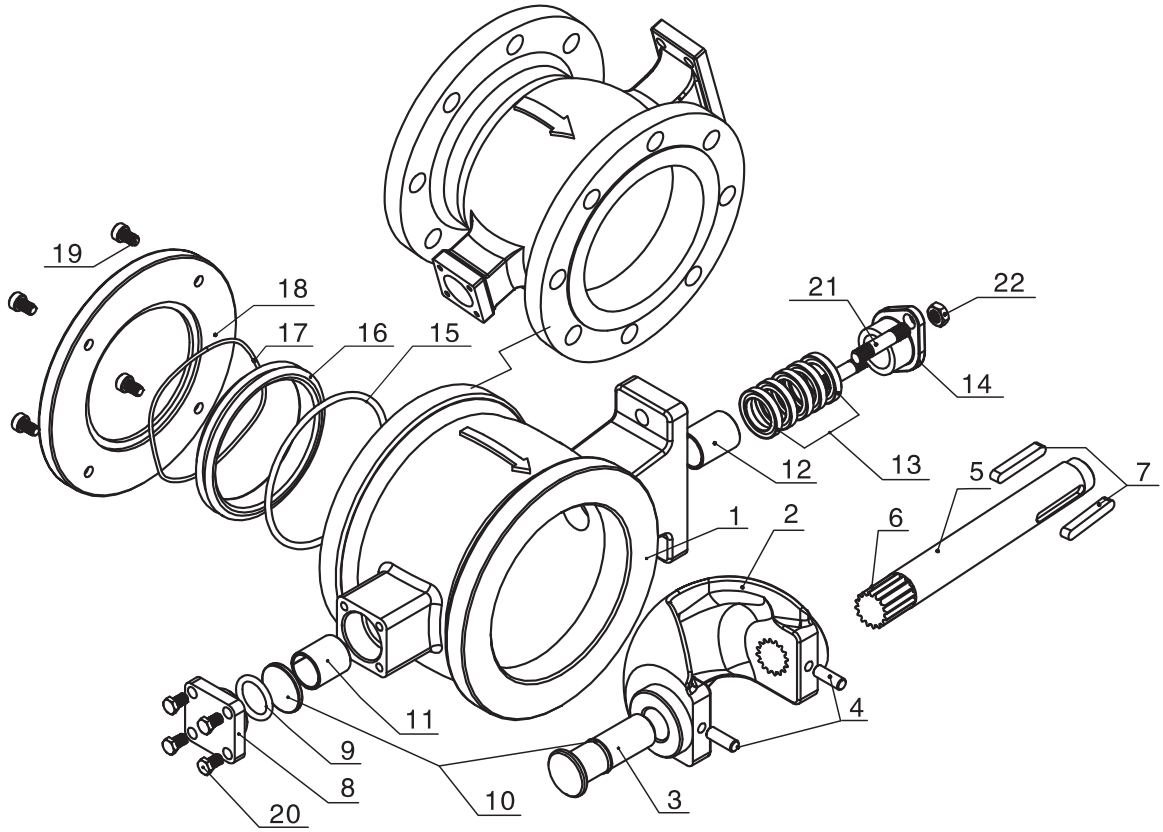
DN [mm]	[inch]	Dimensions A	H	H1	L	P	B1	B	K	N	S	Q	T	Weights kg
25	**1**	102	188	86	110	16	40	35	5	10	80	M10	-	5
32	**$1_{1/4}$**	104	196	86	110	16	40	35	5	10	80	M10	-	6
40	**$1_{1/2}$**	114	196	86	110	16	40	35	5	10	80	M10	-	8
50	**2**	124	210	104	110	16	40	35	5	10	80	M10	-	11
65	**21/2**	145	231	127	120	20	40	35	6	13	80	M10	-	13
80	**3**	165	254	137	120	25	40	35	8	17	90	M12	-	23
100	**4**	193	262	145	120	25	40	35	8	17	90	M12	-	33
125	**5**	213	281	183	133	30	45	40	10	20	100	M12	-	37
150	**6**	229	345	203	145	40	55	50	12	30	130	M16	45	64
200	**8**	244	363	221	145	40	55	50	12	30	130	M16	45	90
250	**10**	297	467	269	193	50	68	60	16	38	175	M20	70	155
300	**12**	337	480	287	193	50	68	60	16	38	175	M24	70	220
350	**14**	391	563	353	210	60	88	80	18	46	175	M24	70	310
400	**16**	480	657	409	248	70	88	80	20	55	215	M27	96	474

* Our range of standart manufacturing is PN16- 40.

Subject to change without notice.

V445 TYPE SEGMENT BALL VALVE

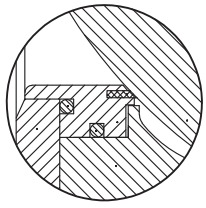
MATERIAL SPECIFICATION AND PARTS LIST



Pt.	Description	Qty	Material	Pt	Description	Qty	Material
1	Body	1	WCB , CF8 , CF8M, F51	12	Self-lubricating bearing	1	Composite material
2	Ball	1	CF8M, F51, Hard C. stellite	13	Packing	1	PTFE , Graphite
3	Lower shaft	1	1.4122, 1.4401	14	Gland	1	CF8
4	Cylindrical pine	2	1.4301 , 1.4401	15	O-Ring	1	Viton , Graphite
5	Upper shaft	1	1.4122, 1.4401	16	Seat	1	PTFE , 1.4401 Stellite, Hard
6	Spline	1	1.4122, 1.4401	17	Wavy spring	1	1.4401
7	Flat key	1	1.4301 , F45	18	Retainer	1	CS , 1.4301 , 1.4401, F51
8	Blind flange	1	CF8 , CF8FM	19	Socked head screw	4	1.4301 , 1.4401
9	O-Ring	1	Viton , Graphite	20	Hexagon screw	4	1.4301 , 1.4401
10	Gasket	1	PTFE , Graphite	21	Stud	2	1.4301 , 1.4401
11	Self-lubricating bearing	1	Composite material	22	Hexagon nut	2	1.4301 , 1.4401

-30 .... +180 ºCelcius

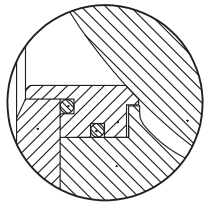
TEFLON SEATS



FLOW DIRECTION

-30 .... +250 ºCelcius

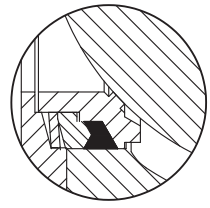
METAL SEATS



FLOW DIRECTION

-30 .... +400 ºCelcius

HIGH TEMPERATURE METAL SEATS



FLOW DIRECTION

V445 TYPE SEGMENT BALL VALVE

TORQUE

- The torque values specified (Md) are based on liquid and lubricant media
- Powdery (non-lubricant) media Md x 1,3
- Dry gases/high viscous media Md x 1,2
- The values specified are based on the initial breakaway torque
- Dynamic torque specification available upon request

Regarding the dimensioning of actuators, please contact our engineers.

DN	Çap	Torque Value Nm	Actuator Selection	
[mm]	[inch]	16 [bar]	Double Acting	Single Acting
25	1"	28	EB5.1SYD	EB5.1SYS
32	1.1/2"	35	EB5.1SYD	EB5.1SYS
40	1.1/4"	42	EB5.1SYD	EB6.1SYS
50	2"	49	EB5.1SYD	EB6.1SYS
65	2.1/2"	83	EB6.1SYD	EB8.1SYS
80	3"	111	EB6.1SYD	EB8.1SYS
100	4"	196	EB8.1SYD	EB10.1SYS
125	5"	209	EB8.1SYD	EB10.1SYS
150	6"	251	EB10.1SYD	EB12.1SYS
200	8"	490	EB10.1SYD	EB265.1SYS
250	10"	839	EB12.1SYD	EB265.1SYS
300	12"	1690	EB270.1SYD	EB280.1SYS
350	14"	2380	EB270.1SYD	EB88.1SYS
400	16"	3640	EB270.1SYD	EB88.1SYS

All values in Nm.

Kv-VALUES

- The Kv-value [m^3 per hour] is the flow of water at a temperature of 5°C to 30°C (41°F to 86°F) at Δp of 1 bar
- The Kv-values specified are based on tests carried out by the Delfter Hydraulics Laboratories, the Netherlands
- Permissible velocity of flow; Vmax 4,5 m/s for liquids, Vmax 70 m/s for gases
- The throttle function is linear at an angle 30° to 70°
- Avoid cavitation!

For further values, please contact our engineers.

DN		Opening angle α°							
[mm]	[inch]	20°	30°	40°	50°	60°	70°	80°	90°
25	1"	0,7	1,7	3,4	6	9	14	22	27
32	1.1/2"	1,3	3,4	6	10	16	23	38	47
40	1.1/4"	1,9	5	9,4	16	24	34	56	71
50	2"	2,9	8	14,5	25	38	55	88	112
65	2.1/2"	4,5	12	23	38	59	84	138	174
80	3"	8	20	38	63	97	138	227	283
100	4"	11	29	55	93	142	203	332	418
125	5"	20	53	100	170	261	371	608	770
150	6"	26	69	131	222	340	484	794	1000
200	8"	46	122	229	390	597	850	1388	1760
250	10"	77	206	386	657	1006	1432	2349	2970
300	12"	102	269	507	861	1319	1877	3079	3900
350	14"	186	497	933	1585	2429	3458	5671	7180
400	16"	262	694	1307	2220	3401	4841	7940	10000

All values in m^3/sec.

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