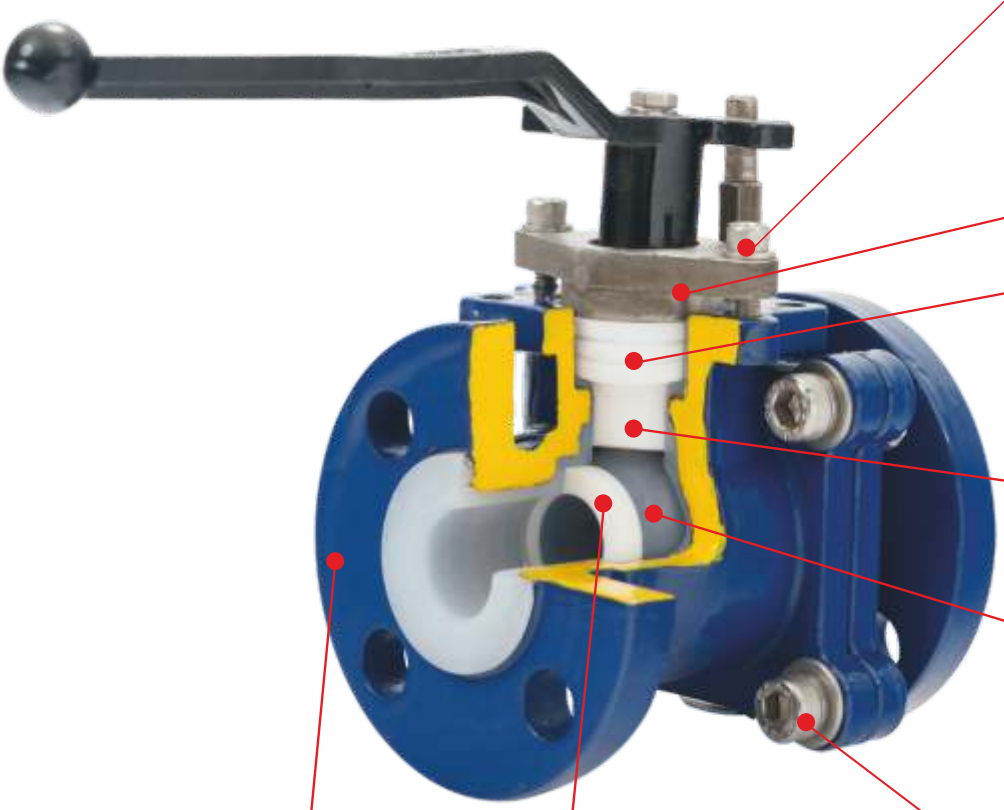
BALL VALVE FEATURES



Gland Bolts For Gland Loading adjustment.

Gland Cover of CF8 or CF8M

Special Chevron Packings. No Cup Seals as it may crack during Operations. Sintered Packings. Material : PTFE / TFM

PTFE / TFM Bush to ensure 100% Alignment of Integral Stem of the Ball.

PFA / Antistatic PFA encapsulated Ball available in options of vented Ball for Chlorine Service and V Port or Characterized port for Control applications.

Allen Bolts in options of B7 / SS Alloy 20 / Hastelloy C

Investment casting of WCB, externally painted with 2 Part Epoxy having 150µ paint thickness

PTFE / TFM Special thickness Seats for better performance and life.

PRODUCT DESIGN AND TESTS PERFORMED

DESIGN PARAMETERS	STANDARD
DESIGN STD	BS EN 17292
SHELL DESIGN	ANSI B 16.34
FACE TO FACE DIM.	ANSI B 16.1
FLANGE CONNECTION RATING	ANSI B 16.5, 150# / DIN PN 10 / JIS
TESTING STANDARD	API 598 / BS EN 12266-1
CONNECTION	FLANGED, RF

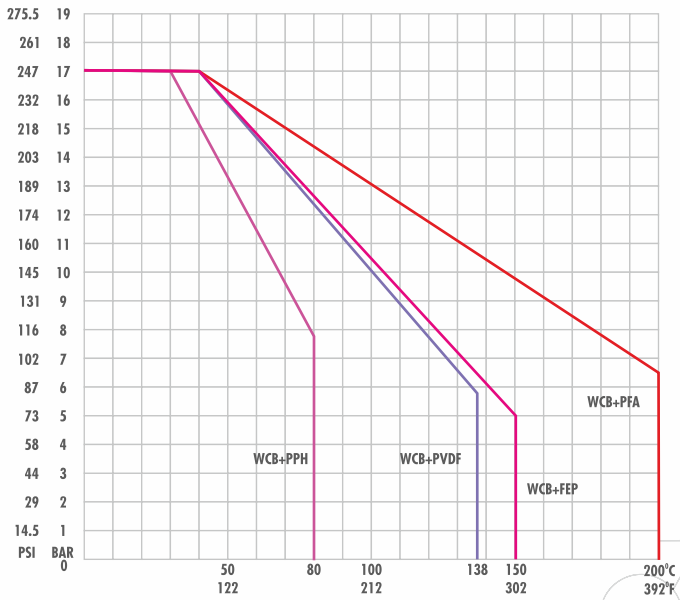
TEST PERFORMED	API 598	API 598
SIZES	0.5" TO 4"	6" TO 12"
HIGH PR. SHELL TEST HYDRO	420 PSI	225 PSI
HIGH PR. SEAT TEST HYDRO	270 PSI	165 PSI
LOW PR. SEAT PNEUMATIC	105 PSI	75 PSI

SPARK TEST	KVDC
SPARK TEST	20 KDVC

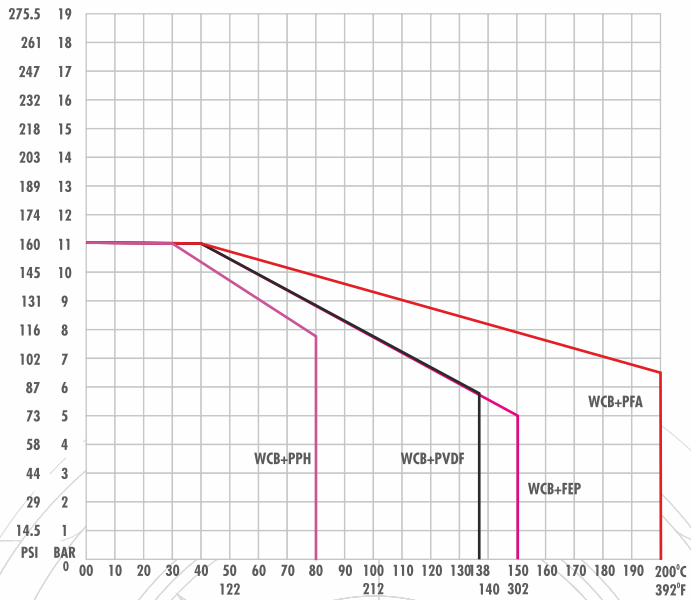
VALVE Cv & TORQUE VALUES

SIZE	Cv FULL PORT	Cv RED. PORT	TORQUE NM FULL PORT	TORQUE NM REDUCED PORT	TORQUE INCH-LBS FULL PORT	TORQUE INCH-LBS REDUCED PORT
0.5"	15	-	10	-	88	-
0.75"	25	-	12	-	106	-
1"	50	39	12	10	106	88
1.5"	185	50	20	18	177	159
2	320	191	25	22	221	195
3	805	330	40	35	354	310
4	1600	790	65	50	575	443
6	4500	-	180	-	1593	-
8	8300	-	280	-	2478	-
10	11725	-	350	-	3098	-
12	18100	-	500	-	4425	-

PRESSURE - TEMPERATURE GRAPH



FOR 17 BAR (250 PSI)
RATING VALVES



FOR 11 BAR (160 PSI)
RATING VALVES

VALVE CODE USED

TYPE OF VALVE	CODE
FULL PORT SIDE SPLIT BALL VALVE	BVFP
FULL PORT CENTRE SPLIT BALL VALVE	BVFP
REDUCED PORT SIDE SPLIT BALL VALVE	BVRP

BODY CASTING	CODE
ASTM A 216 GR. WCB	C1
ASTM A 351 GR. CF 8	C2
ASTM A 351 GR. CF8M	C3

TRIM INSERTS	CODE
ASTMA A 351 GR. CF8	T2
ASTM A 351 GR. CF8M	T3
ASTM A 890 GR. 4A(CD3MN)	T5

LINING MATERIAL	CODE
PFA	L1
FEP	L2
PVDF	L3
ETFE	L4
PPH	L6
ANTISTATIC PFA	L7

BODY BOLTS	CODE
SS 304	F2
SS 316	F3
HIGH TENSILE	F4
ASTM A 193 GR. B7	F5

OPERATION	CODE
LEVER	L
GEAR	G
BARE STEM	B

VALVE CODE USED

LOCKING	CODE
PROVIDED	Y
NOT PROVIDED	N

SIZE											
0.5"	0.75"	1"	1.5"	2"	2.5"	3"	4"	6"	8"	10"	12"
CODE											
0H	75	01	1H	02	2H	03	04	06	08	10	12

HOW TO READ CODE

CODE	BVFPC1T3L1F5LY02	
VALVE TYPE	BALL VALVE FULL PORT	BVFP
BODY CASTING	ASTM A 216 GR.WCB	C1
TRIM INSERT	ASTM A 351 GR.CF8M	T3
LINING MATERIAL	PFA	L1
FASTNERS	ASTM A193 GR.B7	F5
OPERATION	LEVER	L
LOCKING ARRANGEMENT	PROVIDED	Y
VALVE SIZE	2"	02

WEIGHT CHART / VALVE

SIZE	WT. IN KGS CENTRE SPLIT FULL PORT	WT. IN LBS CENTRE SPLIT FULL PORT	WT. IN KGS SIDE SPLIT FULL PORT	WT. IN LBS SIDE SPLIT FULL PORT	WT. IN KGS SIDE SPLIT REDUCED PORT	WT. IN LBS SIDE SPLIT REDUCED PORT
0.5"	3	7	-	-	-	-
0.75"	3.8	8.5	-	-	-	-
1"	4.5	10	4.5	10	4.2	9.25
1.5"	7.5	16.5	7.6	17	7.4	16
2"	12.2	27	10.4	23	11	24
2.5"	15	33	-	-	-	-
3"	21	46	20	44	19.5	43
4"	33	73	33	73	28	62
6"	65	143	60	132	-	-
8"	135	297	-	-	-	-
10"	206	453	-	-	-	-
12"	322	708	-	-	-	-

Pneumatically actuated Ball Valve

Electrically actuated Ball Valve

V-PORT Ball options available for control applications

ACTUATION OPTIONS OFFERED BY UNP

ACTUATOR TYPE	SINGLE ACTING/ SPRING RETURN	DOUBLE ACTING
FAIL POSITION	OPEN/CLOSE	STAY PUT
AIR SUPPLY PRESSURE	4/5 BAR OR 58/72 PSI	4/5 BAR OR 58/72 PSI
BODY MATERIAL OFFERED	AL.ANODIZED/CF8 OR CF8M	AL.ANODIZED/CF8 OR CF8M
MAKE OFFERED	EL-O-MATIC/ROTEX/I-TORK	EL-O-MATIC/ROTEX/I-TORK

SOLENOID VALVES OFFERED

SOLENOID VALVE	SINGLE ACTING/SPRING RETURN ACTUATOR	DOUBLE ACTING ACTUATOR
TYPE	3/2 WAY NAMUR/ NON- NAMUR	5/2 WAY NAMUR/ NON- NAMUR
COIL RATING	24/110/220 V AC OR 24/110 V DC	24/110/220 V AC OR 24/110 V DC
COIL INSULATION CLASS	F OR H	F OR H
COIL HOUSING	WEATHER PROOF/EX-PROOF/ FLAME PROOF OR IS	WEATHER PROOF/EX-PROOF/ FLAME PROOF OR IS
SOLENOID VALVE BODY MATERIAL	ALLUMINIUM/SS 316/ SS 316L	ALLUMINIUM/SS 316/ SS 316L
GLAND CONNECTION	¼" / ½" or ¾" NPT	¼" / ½" or ¾" NPT

LIMIT SWITCHES OFFERED

LIMIT SWITCH	MECHANICAL MICROSWITCH	PROXIMITY TYPE
SWITCHES OFFERED	HONEYWELL OR SIMILAR	P & F OR SIMILAR
NO. OF SWITCHES	1 NO + 1 NC OR 2 NO + 2NC	1 NO + 1 NC OR 2 NO + 2 NC
HOUSING TYPE	WEATHER PROOF / FLAME PROOF	WEATHER PROOF / FLAME PROOF

UNP PROVIDES ELECTRO PNEUMATIC POSITIONERS OF YTC / SIEMENS OR ANY OTHER MAKE OF CUSTOMER PREFERENCE