

3 PIECES BALL VALVE

Ref. 796/797/798/790/791/792/744

Ref. : DS 796

Rev. : 6

Date : 01/09

Page 1/2



Valves and fittings

90 rue du ruisseau 38297 ST QUENTIN FALLAVIER
Tel:(33)04.74.94.15.90 Fax:(33)04.74.95.62.08
E.mail : sferaco@sferaco.fr

SPECIFICATIONS :

- . Full bore
- . Anti-blow out stem
- . Locking device / Red handle

USE :

- . For all common fluids
- . Max. Temperature Ts : 180°C see graph
- . Max. Pressure Ps : 63 bars see graph

RANGE :

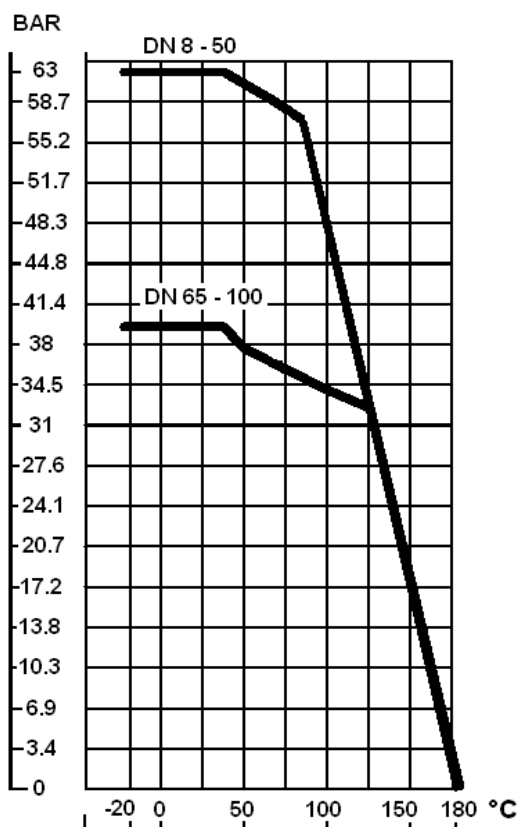
- . Female/Female BSP carbon steel **Ref. 796** 1/4" to 4"
- . But welding carbon steel **Ref. 797** DN8 to DN100
- . Socket welding carbon steel **Ref. 798** DN8 to DN100
- . Female/Female BSP stainless steel **Ref. 790** 1/4" to 4"
- . But welding stainless steel **Ref. 791** DN8 to DN100
- . Socket welding stainless steel **Ref. 792** DN8 to DN100
- . Female/Female NPT stainless steel **Ref. 744** 1/4" to 2"



MATERIALS :

DESIGNATION	MATERIALS 796/797/798	MATERIALS 790/791/792/744
Body	A 216 WCB	A 351 CF8M
End	A 216 WCB	A 351 CF8M
Ball	Stainless steel 316	Stainless steel 316
Stem	Stainless steel 316	Stainless steel 316
Seat	PTFE	PTFE
Gasket	PTFE	PTFE
Packing	PTFE	PTFE
Screw	Stainless steel 304	Stainless steel 304
Handle	Stainless steel 304	Stainless steel 304

GRAPH Pressure / Temperature :



STANDARDS :

- . DIRECTIVE 97/23/CE : CE N° 0035
- Risk category II

BOLT TIGHTENING TABLE :

	Bolt torque (Nm)
DN 1/4 - 3/8"	4
DN 1/2 - 3/4"	8
DN 1"	10
DN 1"1/4	13
DN 1"1/2 - 2"	20
DN 2"1/2	35
DN 3"	45
DN 4"	65

3 PIECES BALL VALVE

Ref. 796/797/798/790/791/792/744

Ref. : DS 796

Rev. : 6

Date : 01/09

Page 2/2

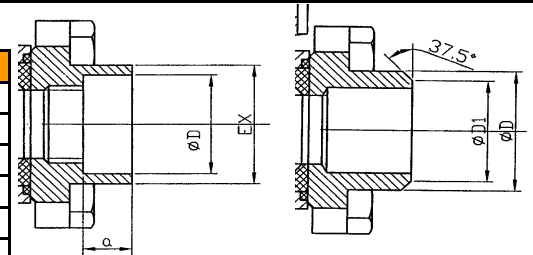


Valves and fittings

90 rue du ruisseau 38297 ST QUENTIN FALLAVIER
Tel: (33)04.74.94.15.90 Fax: (33)04.74.95.62.08
E.mail : sferaco@sferaco.fr

SIZE :

DN	1/4"	3/8"	1/2"	3/4"	1"	1" 1/4	1" 1/2	2"	2" 1/2	3"	4"
L (F./F)	59	60	65,5	76,5	86,2	103,1	118	131,5	164,5	182,7	229,6
L(B+SW)	59	60	65,5	76,5	86,2	103,1	118	131,5	174,5	192,7	239,6
B (F./F)	20	22	23,3	30,8	37,8	47	57	68	86,1	98,2	126,1
B (B+SW)	20	22	23,3	30,8	37,8	47	57	68	96,1	108,2	136,1
H	52	52	63	68	79	88	97	108	128	140	172
E	108	108	113	113	135	135	160	160	230	230	335
X	26	29	34,5	44	53,5	65	75,5	95	120	143,5	177,5
D (BW)	14	17,5	22	27,5	34	43	49	61	76,5	90	115
D (SW)	14,1	17,6	21,9	27,4	34,2	42,8	48,8	61,1	77	89,9	115,4
D1	12	14,5	17	22,5	28,6	36	43	54	68	84	104
EX	20	22	26	33	40	48	55	67	87	101	130
a	10	10	10	13	13	13	13	16	16	16	19
C	38	39	46	54	61	69	81	99	123	145	230
T	25	28	32	40	45	53	64	79	98	116	198
V	6	6	8	8	8	8	12	12	14	16	20
Weight	0,33	0,34	0,51	0,79	1,09	1,93	2,8	4,25	8	12,1	26

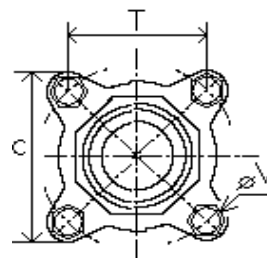
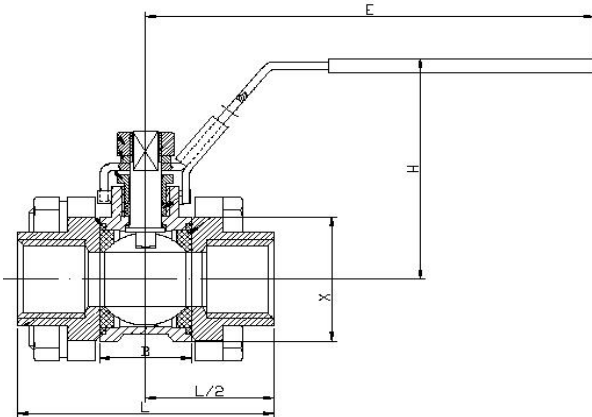


End cap SW

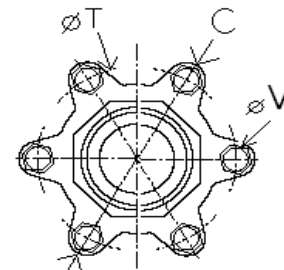
End cap BW

OPTIONS :

REHAUSSE	
DN	Hauteur
1/4"	125,5
3/8"	125,5
1/2"	125,5
3/4"	125,5
1"	125,5
1" 1/4	125,5
1" 1/2	127,5
2"	127,5



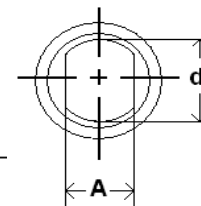
DN 1/4-3"



DN 4"

STEM SIZE :

	DN	1/4"	3/8"	1/2"	3/4"	1"	1" 1/4	1" 1/2	2"	2" 1/2	3"	4"
	A	5	5	5	5	6,5	6,5	8,5	8,5	10	10	16
	d	8	8	8	8	10	10	12	12	14	14	20



BALL VALVE INSTALLATION :

Before installation it is necessary :

- . To verify that the rating marked on the body valve is higher than the working pressure.
- . To be sure that the pipe-line is free from residual of weldings, rubbish, shaving and every kind of extraneous materials.
- . To check for the absence of extraneous particles in the passage, on seat and ball surface.
- . To operate the ball valve twice (open and close).

For split valves (3 pieces) with welding ends, set the valve on piping, make 3 welding point to fix the ends of the valve, unscrew and remove tie-rods and then slip off the central body of the valve. Finally complete the welding and reassemble the body valve.

BALL VALVE MAINTENANCE

Considering working conditions, after a certain period of work and operations the ball valves may have problems of tightness due to seats and seals settlement. Small leakage from the stem can be solved adjusting stem bolt. We suggest this operation once a year.

With reference to pictures of ball valves proceed as follows :

Unscrew and remove the first nut up to allow a slight vertical movement of the lever, without removing it from its site. Then tighten with an hexagonal key the under-placed nut keeping the lever locked by the hand. Screw the top nut to take the ball valve back to initial position. If the leakage persist we suggest servicing the valve dismounting it from the pipe-line replacing seats and seals.

WARNING : To order spare parts is always necessary to know the model of the valve, the ND, material and possible serial number.

To avoid damages to people or things before the service, the ball valve must be depressurised. Then follow these indications :

- Turn the lever to 45° so the ball is opened (or closed) at 50%
- Clear-up the pipe-line on which the ball valve is mounted
- Take the necessary precautions to avoid possible accident. During operations of disassembly wear always appropriate clothes and shoes, anti -acid rubber gloves, glasses, powder/gas-mask evaluating the degree of danger of the medium.
- Wash accurately the ball valve.

- Turn the lever up to close the ball.
- Dismantling the ball valve unscrewing nuts from stud-bolts then remove the central body from ends.
- Remove the ball, replacing if the external surface results damaged.
- Unscrew and remove the first nut on the stem, the wrench, the second nut, spring washers and the pressing bush.
- Remove the stem with the "V" seal and the stem seal.
- Replace seats and the seals from the body.
- Replace the stem, if damaged with the bush.
- Keeping the stem in closed position, put the ball into the body, then fix the ends to the body with stud bolts.
- Reassemble the "V" seal on the stem, replacing if it damaged.
- Reassemble the pressing bush, spring washers, the nut, the lever and the top nut. Reassemble the body between ends.
- Open and close 3/4 times in order to check that the rotation is free from defects. (appropriate torque and uniformity of the ball rotation).

ADVICE : Our opinion and our advice are not guaranteed and SFERACO shall not be liable for the consequences of damages. The customer must check the right choice of the products with the real service conditions.