

**Project: FIRE TEST FOR SOFT-SEATED
BALL VALVE**

Certificate No.: M288-1/09 - 9587

Client: JC Fábricas de válvulas, S. A.

Office: Sant Joan Despí (BCN)

Client's Order No.: ---

Date: 23.03.09

Inspection dates

First: 23.03.09

Order Status: Complete

Final: 23.03.09

This certificate is issued to

Messrs. **JC Fábricas de válvulas, S. A.**, upon their request that the undersigned Suveryor to this Society did attend their premises at their works in Sant Boi de Llobregat - Barcelona (Spain) for the purpose of witnessing the FIRE TEST in accordance with the requirements specified in API 607 and ISO 10497, on the following type of valve:

A manually operate J.C. Ball Valve TL Series of 3" bore 3" as per fig. 415 I.I.T, 150#
Body and Connector material A351 CF8M
Trim: SEE DRAWING 090909

Marks:

- BODY : Col. CT08
- CONNECTOR : Col. LKT1

The test conducted on the valve previously subject to hydraulic pressure was as follows:

The valve in the closed position, filled with water under test pressure, was put in a box and exposed to flames with an environmental temperature in the region 750° C for a period of 30 minutes and established the leakage trough the seat and external to atmosphere during this period. The temperature was checked and recorded every two minutes, while leakages were determined using containers collecting the water leaked during burn period. Afterwards cool-down to 100° C. The valve seat and external hydrostatically tested to the appropriate test pressure and leakages recorded accordingly. Subsequently manually opened up under test pressure differential and finally the valve was fully hydrottested and leakages recorded.

All the following values were determined and recorded together with temperatures, times and pressures as shown on manufacturers Fire Safe Test Report nº C288/09



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Sheet 2 of 3

1. Through-valve leakage during burn period - SATISFACTORY.
2. External leakage during burn and cool-down period - SATISFACTORY.
3. Through-valve leakage during operational test - SATISFACTORY.
4. External leakage during operational test - SATISFACTORY.
5. Operability to full open position and external leakage - SATISFACTORY.

The valve was subject to a visual examination with satisfactory results and subsequently dismantled in order to verify that valves components comply with the drawing and parts list supplied by the manufacturer, while seat rings were found completely destroyed.

The manufacturers Fire Safe Test Report nº C288/09 and drawing 090909 herewith attached were satisfactory checked and signed.

The above is considered in accordance with the mentioned specifications requirements, therefore the subject valve has satisfactory passed the prescribed fire test and can be also qualified as follows.

<u>DN</u>	<u>CLASS RATING</u>	<u>PN RATING</u>
80, 100, 125, 150	150#, 300#	10, 16, 25, 40



Surveyor Javier Aranda García

SGS Tecnos, S.A.

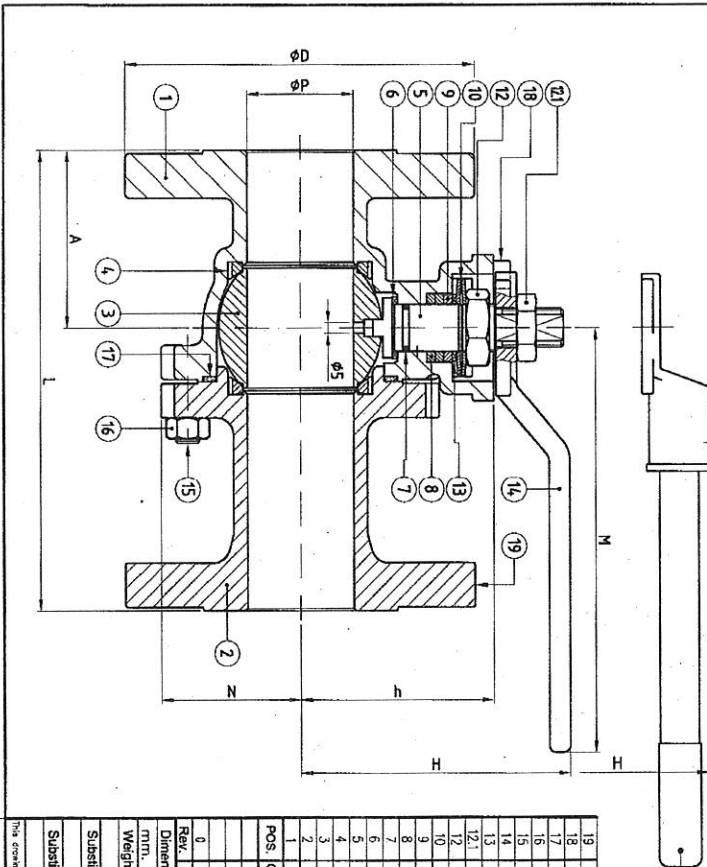
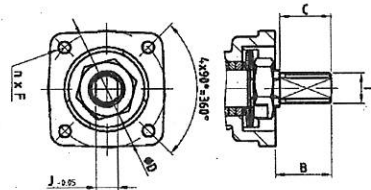
C/ Las Planas, 1 - Nave B
Polígono Industrial Font Santa
08970 Sant Joan Despí (Barcelona)
Tel.: (34) 93 477 01 71 - 93 477 01 69
Fax: (34) 93 373 15 00

DOCUMENTS ATTACHED:

Sheets reviewed and stamped
Accordingly.

090909

DN	L	φD	φP	A	M	H	h	N
1/2"	108 / 14.0	88.9 / 95	15	4.7 / 6.0	170	68	4.1	31
3/4"	117 / 15.2	98.5 / 111.5	20	5.0 / 6.5	170	70	4.3	33
1"	127 / 16.5	108 / 124	25	5.2 / 7.0	170	86	5.8.5	39
1 1/2"	165 / 19.0	127 / 155.5	4.0	6.5 / 8.0	200	122.5	86.5	4.8
2"	178 / 21.6	152 / 165	50	6.1 / 8.3	200	127.5	91.5	6.3
2 1/2"	190 / --	178 / --	65	7.5 / --	350	14.0	104	7.8
3"	203 / 28.3	191 / 210	78	7.8.5 / 11.8	4.50	190	118.5	8.7
4"	229 / 30.5	229 / 254	100	9.0 / 13.3	4.66	192.5	14.4	10.8
6"	394 / 4.0	279.5 / 318	151	17.4 / 16.0	775	259	20.3	15.2
8"	457 / 50.2	343 / 381	203	20.9 / 23.9	845	319	25.0	20.2



DN	ISO 5211	B	C	φD	n x F	I	J	Weight (kg)	Quantity	Item
1/2"	F 05	17	11	50	4 x M6	M10	7	1.7 / 2.4	--	--
3/4"	F 05	18	11	50	4 x M6	M10	7	2.2 / 3.5	--	--
1"	F 05	22	21	50	4 x M6	M12	8	2.9 / 4.6	--	--
1 1/2"	F 07	33	32	70	4 x M8	M18	12	6 / 9.2	--	--
2"	F 07	33	32	70	4 x M8	M18	12	8.5 / 11.5	--	--
2 1/2"	F 07	34	33	70	4 x M8	M22	15	13.3 / --	--	--
3"	F 10	34	33	102	4 x M10	M22	15	18.5 / 25	--	--
4"	F 10	45	43.5	102	4 x M10	M28	19	29.3 / 39.5	--	--
6"	F 12	56	54.5	125	4 x M12	M36	24	64.5 / 88.1	--	--
8"	F 14	69	67	140	4 x M16	M48	32	123.2 / 160.5	--	--

Wrench for DN-4" to DN-8"
 NOTE 1
 DN-1/2" - 1" : A 4.79 TP 316
 DN-1 1/2" - 8" : A 351 Gr. CF8M

Pos.	QUAN.	DENOMINATION	ALIT.
19	2	IDENTIFICATION PLATE	STAINLESS ST.
18	1	BOIT	DN-933 A2
17	1	BODY CONNECTOR SEAL	AS1 316L + PTFE + GRAPHITE
16	--	NUT	A 194 Gr. 2H4
15	--	STUD	A 193 Gr. B7M
14	1	WRENCH	MODULAR IRON
13	1	ANTI-FRICTION WASHER	25% G.F. + PTFE
12.1	1	NUT	AS1 303
12	1	GLAND NUT	AS1 303
10	2	DISK SPRING	AS1 303
9	1	GLAND	AS1 303
8	--	GLAND PACKING	GRAPHITE
7	1	TOP RING	FKM
6	1	STEEL THRUST SEAL	25% G.F. + PTFE
5	1	SEAL RING	A 479 TP 316
4	2	SEAL RING	TM-1600
3	2	BALL CONNECTOR	NOTE 1
2	1	BODY	A 216 Gr. WCB (C & D 25%)
1	1	BODY	A 216 Gr. WCB (C & D 25%)

Revisión: 0
 Modificación: 0
 Dimensiones: 09-09-08
 Checked: 09-09-09
 Weight: 0
 Substituted by: 0
 Scale: 0

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 Modificación: 0
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GENERAL DIMENSIONS
 FIG. 315M45 ALIT./ALIT. DN-1/2" - DN-8" Class-150 RF FB

JC Valves
 JC Fabrica de válvulas, s.a.
 c/da Sant Joan Despi de Llobregat (Spain)
 Tel. +341 938 59 00
 Email: info@jcvalves.com

Drawing no.: 090909