

API 6A BALL VALVES

Side Entry, Top Entry, Double Ball Trunnion Valves



LICENSE
6D-0265
6A-1175
6DSS-0029



Member of CISQ Federation



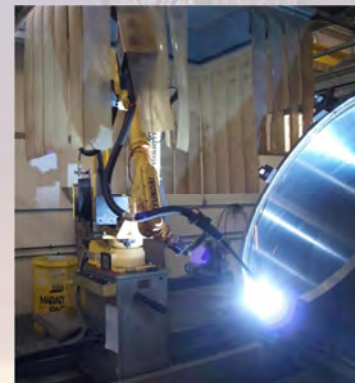
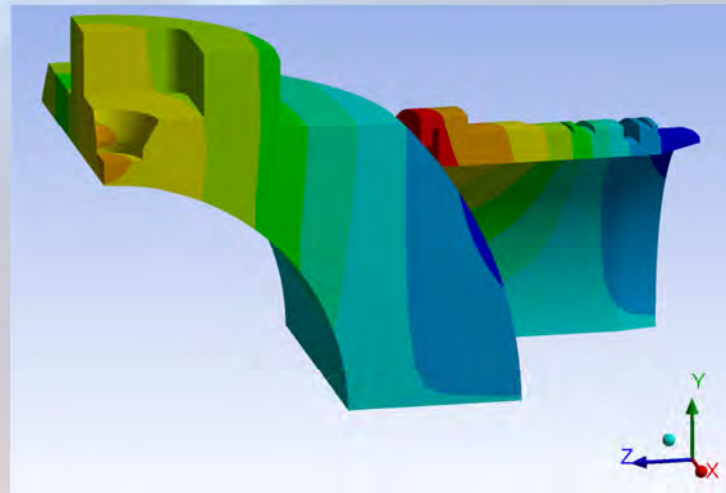
CERTIFIED MANAGEMENT SYSTEM
ISO 9001 - ISO 14001
ISO 45001

COMPANY PROFILE

DAFRAM S.p.A., founded in 1956, was the first company to manufacture floating ball valves in Italy. The long experience gathered during more than 60 years of activity ensures that DAFRAM is one of the most famous and competitive ball valve companies in the world. Today DAFRAM is a specialized manufacturer of high quality ball valves for Chemical, Petrochemical, Oil&Gas, Power Generation, both for on-off and flow control applications.

DAFRAM's factory is located in Urbisaglia (Macerata), in the center of Italy, on an industrial complex of more than 32000 square meters, 12000 of which are covered workshops. The company departments include commercial, technical and engineering offices and the factory consists of two extremely modern workshops. These extensive facilities provide **design, production, assembling, testing, painting and welding** of ball valves up to large sizes and weights under one roof.

In today's competitive market, DAFRAM is an excellent example of how to integrate the principles of continuous improvement through a widespread application of **lean philosophy** at all levels.



API 6A APPLICATION – TECHNICAL DESCRIPTION



The use of API 6A Ball Valves is becoming more and more popular in many Offshore applications (Topside and Subsea) and Onshore Production and Process equipment. Special design solutions and high performance materials allow trunnion ball valve construction to be the best technical and efficient solution for Safe Isolation of pipeline and process as SDV, ESDV, HIPPS and MOV valves.

DAFRAM long experience and proven quality are fully employed to perform engineering and manufacturing of these very critical valves. Different construction typologies and material combinations are available in order to best fit demanding process conditions and Customer requirements.

STANDARD FEATURES

- Side-entry construction: 2 pieces split bolted body, easily removable from the line and easy to maintain
- Top-entry construction: full in-line maintenance (also in vertical installations, on request)
- Double Ball construction DBB: two obturators (balls) with overall space and weight saving, several bleed configurations available
- Double Block & Bleed function (stem seals in-line maintenance)
- Self-relieving seat design
- Antistatic device
- Anti blow-out stem
- Fire safe certification according to API 6FA. Fire safe design design according to API 6FA – API 607 – BS 6755 Part 2

OPTIONAL FEATURES

- Double Piston Effect seats (DIB-1 or DIB-2 valves)
- Emergency sealant injection system
- Weld overlay on sealing areas or integral on wetted parts
- Metal-to-metal seat design, no leakage PSL 3G / PSL 4 with DAFRAM compact design (minimum weight)
- Extended bonnet for High Temperature or Cryogenic service
- Vent/drain configuration according to Customer requirements
- Bleed valve of Double Ball Valves according to Customer requirements

PRODUCTION RANGE

Pressure rating:

API 2000, 3000, 5000, 10000, 15000

Sizes:

From 1/2" to 13". Full or Reduced Bore. Other sizes available upon request

Construction:

Side-entry, Top-entry, Double Ball (Double Block&Bleed)

End Connections:

Ring Joint Type 6B/6BX. Butt weld, Hub End, Custom flange types available upon request

End-to-end and overall dimensions:

According to valve type and Customer requirements (API 6A as reference)

Materials:

Body (API 60K-75K) and Trim: Carbon Steel, Low-alloy Steel, Martensitic SS, Duplex or Superduplex SS, Nickel Alloys, Titanium

Weld Overlay:

On sealing areas or wetted surfaces on request. Inconel or duplex overlay.

Seat:

Peek, Metal (TCC hardfacing)

Material Class:

AA, BB, CC, DD, EE, FF, HH, ZZ

Seals:

Triple barrier stem seal, double barrier body and seat ring seals, fire-safe secondary seals

Temperature Class:

K, L, N, P, R, S, T, U, V, X, Y

Product Specification Level:

PSL 1, PSL 2, PSL 3, PSL 3G, PSL 4

Performance Requirements:


PR1, PR2

Low Fugitive Emissions:

Up to ISO 15848-1 & 2 class AH / Shell MESC SPE 77/300 & 312 class A(HS)

DAFRAM APPROVALS

DAFRAM obtained the first API 6A monogram license in 2010, certificate 6A-1175



Certificate of Authority to use the Official API Monogram
License Number: 6A-1175 **ORIGINAL**

The American Petroleum Institute hereby grants to
DAFRAM S.P.A.
Contrada Montedoro N°13 (Ex SP78 Km 6)
Urbisaglia, Macerata
Italy

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6A** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6A-1175**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.


The scope of this license includes the following: Gate, Ball, Plug Valves at PSL 1, PSL 2, PSL 3, PSL 4

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: MARCH 31, 2024
Expiration Date: MARCH 31, 2027

Anchal Liddar
 Senior Vice President of Global Industry Services

To verify the authenticity of this license, go to www.api.org/compositelist.



2018-151 | Digital

DNV-GL
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INSPECTION REPORT No. 01

DAFRAM
VALVOLE A SFERA - BALL VALVES

API 6A PR2 TEST REPORT

DAFRAM S.p.A. | www.daffram.it | VAT No. 04877861306
 Registered office: Via Fratelli, 7 - 20121 Milano - ITALY
 Local office: C.da Montedoro, 13 - 62010 Urbisaglia (MC) - ita - +39 0733 51191

Customer:	Dafram S.p.A. (Qualification Test)
Technical specifications:	API 6A - Specification for Wellhead and Christmas Tree Equipment 3.7.51C PR2 Rev. B - Dafram Internal Product -
Job:	CD160396
Item:	1100
Serial number:	1102198120201
Valve Type:	FB41
Size - DN:	3 1/2" - 78
Class:	API 15000
Rating pressure (bar):	690
PSL:	PSL 4
General arrangement drawing:	ABC20093 Rev. A
Quantity:	1

NOTE
 Test Procedure according to Dafram doc. 3.7.51C PR2 and API 6A Annex F - PR2 validation test.
 Tested valve construction and material's according to doc. no. ABC20093 - General Arrangement Drawing.

TEST VALIDATION

DAFRAM Quality Control	Customer Inspector	Third Party Inspector
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

Inspector no. 028-4-PR2
 Date: 30 JUL 2017
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 VITE 10P
 ©/Revised/ C/Revised

API 6A license certificate up to PSL 4

PR2 test certificate by DNV-GL

DAFRAM EXPERIENCE – Case studies



Valve size & class: 5.1/8" API 15000
 Construction: side entry
 PSL: 3
 Body/trim material: F51/S31803 + TCC
 Seat material: TCC
 Service: HIPPS – Sour
 Project: BIEN DONG 1 PROJECT – HIPPS VALVES



Valve size & class: 4.1/16" API 10000
 Construction: top entry
 PSL: 3G
 Body/trim material: F55/S32760 + TCC
 Seat material: TCC
 Service: Sour gas
 Project: ASSIL&KARAM PROJECT



Valve size & class: 4.1/16" API 10000
 Construction: DBB
 PSL: 3
 Body/trim material: 4130/F51
 Seat material: PEEK
 Service: FPSO production
 Project: HI39621 FPSO ALFA

Complete reference list is available upon request



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