



AISWARYA LAKSHMI ENGINEERING WORKS

(ISO 9001:2015 CERTIFIED COMPANY)

INSPECTION CERTIFICATE

(AS PER EN 10204 3.1)

CUSTOMER	JC VALVULAS INDIA PVT LTD., CHENNAI	OUR T.C No.	ALEW/GST/26-27 / 31 / 06 ✓
PART NAME	STEM DN40 + VITON O-RING + BUSHING ASTM A182 Gr.F6A CLASS-2 ✓	DATE	20.04.2026
PART No.	E40F6A2TJQ ✓	OUR INV No.	GST / 26-27 / 31
DRG No.	E40Q ✓	MILL TC No.	920026948/28
DRG REV No.	0	HEAT No.	FHD86 ✓
P.O.No.	JCCMP-2526-02257	QYT (NO' S)	9 ✓

MATERIAL SPECIFICATION :ASTM A182/A182M-24C, Gr.F6A Class 2 (UNS S41000)

CHEMICAL PROPERTIES

TEST REPORT NO: TR/25-26/35316-1 Dt 10-11-2025

%	C	Si	Mn	P	S	Cr	Ni
MIN						11.5 ✓	-
MAX	0.15 ✓	1.00 ✓	1.00 ✓	0.040 ✓	0.030 ✓	13.5 ✓	0.50 ✓
ACTUAL	0.086 ✓	0.264 ✓	0.751 ✓	0.017 ✓	0.011 ✓	12.18 ✓	0.240 ✓

MECHANICAL PROPERTIES

TEST REPORT NO: TR/25-26/35316-1 Dt 10-11-2025

PARAMETER %	MIN	MAX	ACTUAL
TENSILE STRENGTH IN Mpa	585 ✓	-	704 ✓
YIELD STRENGTH IN Mpa 0.2% OFFSET	380 ✓	-	566 ✓
ELONGATION IN GL OF 50mm%	18 ✓	-	30.00 ✓
REDUCTION IN AREA %	35 ✓	-	71.00 ✓
HARDNESS(HBW)	167-200 ✓	-	197 ✓

METALLURGICAL PROPERTIES

I.G.C	: NIL
IMPACT	: NIL
MICRO	: NIL
FERRITE	: NIL
HEAT TREATMENT	: Normalized at 950 c/3 Hrs soaking fast air cool 1st tempered at 740 c/3 Hrs soaking air cool 2nd tempered at 680 c/3 Hrs soaking air cool ✓

REMARKS:

- 1) We hereby certify that the items above have been tested and inspected in our presence in accordance with drawings and satisfy the requirements for "ASTM A182/A182M-24C, Gr.F6A Class 2 " The results comply with product description.
- 2) Materials Free From Radioactive contamination ✓
- 3) Visual and Dimensional Found satisfactory as per drawing. ASME BPVC Section VIII Division 1, UF-45 and UF-46.
- 4) Markings done according to MSS-SP-25 ✓
- 5) No weld Repair Performed. ✓
- 6) MARKING, PUNCH IDENTIFIED AS F6A CL 2 FHD86 ✓
- 7) Material is ultrasonically tested as per ASTM A388/388M & Found satisfactory ✓
- 8) Material confirms to NACE MR0175/ISO - 15156- 2020 and NACE MR0103/ISO -17945 - 2016 ✓
- 9) JC MDS NO -JC-MDS-357 REV 10 ✓

WE HEREBY CERTIFY THAT THE ITEMS MENTIONED ABOVE HAVE BEEN TESTED, INSPECTED & FOUND TO BE IN ACCORDANCE WITH THE SPECIFICATION REQUIREMENTS.

For AISWARYALAKSHMI ENGINEERING WORKS

R.L.Thirumurugan

Mr.L.Thirumurugan
Quality Incharge



Address 132A, SIDCO INDUSTRIAL ESTATE, AMBATTUR, CHENNAI - 98. Email Id: alewchennai@gmail.com

JC Valvulas India Pvt. Ltd.
Chennai, Tamil Nadu, India
Verified & Accepted

Q.A. *R.S.K.f*



Test Report

TC1472825000114121F

Customer: M/s. Aiswarya Lakshmi Engineering Works No. 132A, Sidco Industrial Estate, North Phase, Ambattur , City: Chennai , 600098	Report No.:	TR/25-26/35316-1
	Report Date:	10-11-2025
	Customer Ref. No.:	763
	Ref. Date	07-11-2025
	Sample Received Date:	07-11-2025
	Date Of Completion:	10-11-2025

Samples drawn by Customer

Sample Description: Rod, Size: Dia 36mm, Material: ASTM A182/A182M-24C, Gr.F6A Class 2 (UNS S41000), Heat No: FHD86

Discipline : Chemical, **Group :** METALS & ALLOYS

SPECTRO CHEMICAL ANALYSIS

Test Method : ASTM E1086:2022

Verified By: PAPPITHA

Tested on : 10-11-2025

Test Parameters	Result	Requirement
% Carbon	0.086	0.15 max.
% Silicon	0.264	1.00 max.
% Manganese	0.751	1.00 max.
% Phosphorus	0.017	0.040 max.
% Sulphur	0.011	0.030 max.
% Chromium	12.18	11.50-13.50
% Nickel	0.240	0.50 max.

Remarks : The material conforms to ASTM A182 Grade F6a Class-2 with respect to test/s carried out

Discipline : Mechanical, **Group :** MECHANICAL PROPERTIES OF METALS

TENSILE TEST

Test Method : ASTM A370:24a

Verified By: K KARUNAGARAN

Tested on : 08-11-2025

Test Parameters	Result	Requirement
0.2% Proof Strength(N/mm ² or Mpa)	566	380 min.
Ultimate Tensile Strength (N/mm ² or Mpa)	704	585 min.
Elongation (%) 4D GL	30.0	18 min.
Reduction of area (%)	71.0	35 min.

Remarks : The material conforms to ASTM A182 Grade F6a Class 2 with respect to test/s carried out



NOTE : This report relates only to the particular sample submitted for test * Any correction is not attested shall invalidate this certificate * Sample will be destroyed after 15 days from the date of testing unless instructed otherwise * Any complaints about this report should be communicated in writing within 7 days of this report * This report not to be produced wholly or in parts and cannot be used as an evidence in a court of law and shall not be used in advertising Media without prior permission in writing * Sample description is not verified in all cases and is given as described by the customers * Sample are not drawn by us unless otherwise stated * Laboratory reports the statements of Conformity to material specification as per Decision Rule 1, Non Conformity as per Decision Rule 4 & For Rule 2 & 3 Customer provides feedback.





MICROLAB TESTING PRIVATE LIMITED
An ISO/IEC 17025 MATERIAL TESTING LABORATORY
Accredited by NABL vide Certificate Number **TC-14728**
D25, Ambattur Industrial Estate, Chennai – 600058
Ph: 044-26242525/044-26244399,
Email: cre@microlabtesting.com
Web: www.microlabtesting.com



TC1472825000114121F

TR/25-26/35316-1 Dt- 10-11-2025

HARDNESS TEST		Test Method : ASTM E10:2023
Verified By: SANTHOSH KUMAR.B		Tested on : 08-11-2025
Test Parameters	Result	Requirement
Diameter of the ball (mm).	5 ✓	
Test force (kgf).	750 ✓	
Brinell Hardness Value (HBW)	195, 197, 195 ✓	167-200 ✓
Remarks :The material conforms to Customer Specifications with respect to test/s carried out ✓		

P.L Saravanan
Head- Chemical & Q.M.
Authorised Signatory

For MICROLAB

P. Selvakumar
Asst. Technical Manager
Authorised Signatory

----- End of Test Report -----



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JC Valvulas India Pvt. Ltd.
Chennai, Tamil Nadu, India
Verified & Accepted
Q.A.