SEVERN GLOCON INDIA

SEVERN GLOCON INDIA PRIVATE LIMITED

F 96 & 97 SIPCOT INDUSTRIAL ESTATE, IRUNGATTUKOTTAI
CHENNAI - 602 117

FORM III C

CERTIFICATE OF MANUFACTURE AND TEST OF BOILER MOUNTINGS AND FITTINGS.
(Regulation 4G)

TC No.	519	Date	05/10/2020
Intended Working Pressure in Kg/Cm2 (g)	105.4	Hydraulic Test Pressure in Kg/Cm^2 (g)	159
Name of Parts :- **CAST CARBON STEEL ANGLE TYPE CONTROL VALVE**		Main Dimensions	1" Class 600
		Body Material	ASTM A216 Gr. WCC
Maker's Name and Address : **SEVERN GLOCON INDIA PRIVATE LIMITED** F 96 & 97 SIPCOT INDUSTRIAL ESTATE, CHENNAI - 602 117		Assembly Drawing No.	SGI/IBR-289

Customer Name And Address : **Indian Oil Corporation Limited, Panipet Refinery, PO - Panipet Refinery, Panipet - 132140, Haryana India**

MAXIMUM PARAMETERS OF MEDIA FOR WHICH THE VALVE / ~~FITTINGS~~ CAN BE USED

INTENDED WORKING TEMP. OF MEDIA IN °C	38	100	150	200	250	300	350	375	400	
PERMISSIBLE MAX WORKING PRESSURE IN Kg/Cm^2(g)	105.4	105	102.3	99.1	94.5	87.4	81.6	77.2	70.8	

HEAT No / CODE	% CHEMICAL COMPOSITION								PHYSICAL TEST RESULT				
	C	Mn	Si	P	S	Cr	Mo	Ni	UTS Mpa	% E GL : 50mm	Bend Test AT 120°	Valve Serial No.	Qty
F5851	0.195	0.891	0.294	0.018	0.010	0.046	0.006	0.061	502	34.04	Passed	8022-002-001	1

TOTAL No. OF VALVES One

Other Tests: -

Raw Material:

Process of manufacture: Induction Melting

Fully Killed / Rimmed: -

Heat No	TC No. and Date	Specification	Name of the maker	Name on the Inspecting Authority
F5851	SG/F5851 07/08/2020	ASTM A216 Gr. WCC	Veeyes Steelcast Private Limited	Well Known foundry

CERTIFIED that the particulars entered herein by us are correct. The **valve** have been designed and constructed to comply with the **INDIAN BOILER REGULATIONS** for a working pressure of **105.4 Kg / cm2 (g) and maximum temperature of 400°C** and satisfactorily withstood a Hydraulic test using water ~~or kerosene or any other suitable liquid~~ to a pressure of **160 Kg / cm2 (g)** on the **05th Oct 2020** in the presence of our responsible representative whose signature is appended hereunder.

K.RAMESH KUMAR
DGM - Quality
Maker's Representative
(Name and Signature)

S.MANIVANNAN
General Manager - Operations
Maker
(Name and Signature)

IDENTIFICATION MARK :

The Parts have been stamped with the inspecting authority's official Stamp thus. on the body ~~/ cover~~ flange.

We have satisfied ourselves that valve / ~~fitting~~ has been constructed and tested in accordance with the requirements of the **INDIAN BOILER REGULATIONS, 1950.** We further certify that the particulars entered herein are correct.

Name and Signature of the Inspecting Officer who witnessed the tests

Place : Chennai
Date : 05/10/2020

Name & Signature of the Inspecting Authority

Note: In case of valve chest made and tested by well known foundries or forges recongnised by the central boiler board in the manner as laid down in regulation 4A to 4H listed in 'Appendix K' , particulars regarding the material as certified by them, in any form shall be noted in the appropriate columns or paragraphs in the Certificates and in case certificates from well known foundries or forges is produced, such certificates may be accepted in lieu of the Certificates from Inspection Authority in so far as it relates to tho testing of material specified in the form.

Strike out which is not applicable

GRN02010442 T10442C1, C2

2022-1-1
2-1

VEEYES

Veeyes Steelcast Private Limited.

4/363-A,Kallipalayam,Chikarampalayam Village Post,
Karamadai,
Coimbatore, Pincode :641104

ISO CERTIFICATE No:MUM6037939

VSC/LAB/06 - R0

INSPECTION CERTIFICATE

FORM - III- F Certificate of Manufacture and Test of Castings (Regulation 73-80)

Customer : SEVERN GLOCON INDIA PRIVATE LIMITED CHENNAI 602117	T.C. No : SG/F5851, T.C.Date : 07/08/2020
P.Order : PO2000492 Dt. 03/05/2020	Heat No : F5851, Pour Date : 20/06/2020
Specification : **ASTM A216 Gr.WCB/WCC-2018**	CASTING PROCESSED BY INDUCTION MELTING FOUNDRY IDENTIFICATION : VSC

CHEMICAL COMPOSITION %

Element	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	V	CE	RES		
Minimum	---	---	---	---	---	---	---	---	---	---	---	---		
Maximum	0.220	1.280	0.600	0.030	0.025	0.500	0.500	0.200	0.300	0.030	0.420	1.000		
Actual	0.195	0.891	0.294	0.018	0.010	0.046	0.061	0.006	0.001	0.005	0.359	0.119		

HEAT TREATMENT : Normalizing - Heated to 920°C Soaked for 05.00 Hrs and Air Cooled. Cycle No.D5664

MECHANICAL PROPERTIES

Requirments	Yield Strength		Tensile Strength		% Elongation	% Reduction	Hardness	Bend Test	Impact Test in ()			
	Kgf/mm²	MPa	Kgf/mm²	MPa	GL :50 mm	In Area	HBW	120 ° D=3t	(10mm X 10mm X 55mm)			
	0.2 % Rp		-		-	-	-					
Minimum	28.03	275	49.44	485	22.00	35.00	---	-				
Maximum	---	---	66.77	655	---	---	200	-	1	2	3	Avg
Actual	29.38	288	51.18	502	34.04	65.48	148	PASSED	--	--	--	--

ITEM DESCRIPTION

SL.No.	Description	Drawing No.	Part No.	CSL No.	Qty
1	BODY CASTING 1" 150-600# ANGLE	2A99064 REV 01	2A99064-C1020-IBR1	10, 11	2 Nos

SEVERN GLOCON · INDIA QUALITY

REVIEWED & ACCEPTED
Sign / Date 14/8/20
P. KANIKKANNAN

Remarks :

Visual inspection on above parts acceptable to MSS SP-55 Type II-XII a Satisfactory & Castings are dimensionally accepted.
Radioactive level measured, delivered materials are free of radioactive contamination
MPI performed and acceptable to ASME B16.34 APPENDIX II , ASME BPVC SEC VIII DIV-1 APP 6 & MSS SP-53
The above part confirms to as per NACE MR 0103/ISO 17945-2016 and MR0175 / ISO 15156-2015
The above part confirms to as per PTS:RM001 Rev 1, PSR: IBR1 Rev1& SGI/OP/130 Rev 4
IBR WELL KNOWN FOUNDRY up to 400 Kgs/Piece. CBB Certificate No:371/ Dt 05.09.2016 valid upto 08/06/2021
No major weld repair carried out the above part. & Carbon Steel Fully killed & fine Grained.

We Confirm that the above material was manufactured, sampled, tested and inspected in accordance with the drawings, material specification and customer order requirements , INDIAN BOILER REGULATIONS 1950 and found to meet the requirements.

C.KANNAN
Manager QA
Makers Representative
Veeyes SteelCast Private Limited,CBE-104

VEEYES STEEL CAST PRIVATE LIMITED Coimbatore 641 104

P.JAYARAJ
Head - Production
Makers
Veeyes SteelCast Private Limited,CBE-104

SGI/IBR-289

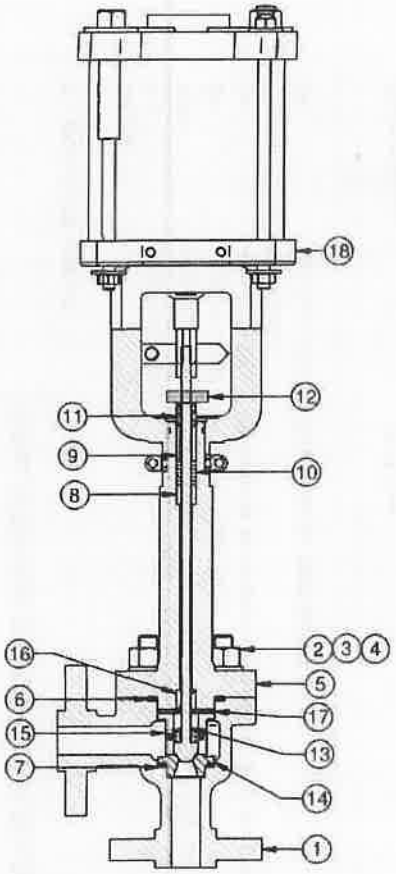


TABLE 1: PARTS LIST

ITEM NO	TITLE	MATERIAL	QTY	ITEM NO	TITLE	MATERIAL	QTY
1	BODY	ASTM A216 WCC	1	10	PACKING RING	PTFE Chevrons	1
2	STUD	A193Gr B7	4	11	GLAND FOLLOWER	316 SS + STELLITE	1
3	NUT	A194Gr 2H	4	12	GLAND FLANGE	316 SS	1
4	WASHER	Carbon Steel	4	13	PLUG	316 SS + STELLITE	1
5	BONNET	ASTM A216 WCC	1	14	SEAT	316 SS + STELLITE	1
6	GASKET BODY	Spiral Wound SS316L/Graphite	1	15	CAGE	316 SS	1
7	GASKET SEAT	Spiral Wound SS316L/Graphite	1	16	LOWER GUIDE	316 SS + STELLITE	1
8	PACKING GUIDE	Solid Stellite	1	17	STEM GUIDE RETAINER	316 SS	1
9	PACKING SPACER	SS 316/316L	1	18	ACTUATOR	CARBON STEEL	1

TABLE 2: PRESSURE TEMPERATURE CHART

Temperature	Working Pressure for 600# WCC	Hydro Pressure
°C	Kg/Cm² (g)	Kg/Cm² (g)
-29 to 38	105.4	159
100	105.0	-
150	102.3	-
200	99.1	-
250	94.5	-
300	87.4	-
350	81.6	-
375	77.2	-
400	70.8	-

TABLE 3: DRAWING DETAILS

Body Casting No	2A99064
Body Machining No	2A01236

SELVAKUMAR S
Assistant Manager – Product Engg & Design
Severn Glocon India Pvt.Ltd,
F96 & 97, SIPCOT Industrial Park,
Irungattukottai - 602 117.

APPROVED
105/41/289
Date : 06.05.2020

T.SAKTHIVEL
COMPETENT PERSON
AUTHORIZATION No.
INSPECTING AUTHORITY

NOTES :
1. DESIGN,MANUFACTURING,INSPECTION ARE AS PER IBR 1950.
2. ALL DIMENSIONS ARE IN INCHES
3. STRESS RELIEVING HEAT TREATMENT SHALL BE PERFOMED AS PER IBR 1950.

CHANGE RECORD

ISS NO	ECO No.	DATE	DRAWN	CHECKED	APPROVED
1	NA	18.04.2020	GOWTHAM	DEEPAN	SELVA

DRAWING NO	SGI/IBR-289
DESCRIPTION	1" 600# RF Angle Assembly

SEVERN GLOCON GROUP

GENERAL ARRANGEMENT DRAWING

SEVERN GLOCON INDIA

SGI/FR/DE/016B - Iss 2

8022-2-1

SEVERN GLOCON • INDIA

Document No : WTC/IBR-289
Issue No : 1
Date : 18.04.2020

SHELL THICKNESS CALCULATION AS PER IBR 290-D

T = (WPxD)/(2f+WP)+C

Where

T =	Shell Thickness
WP=	Allowable Maximum Pressure for Service Temperature of Material
D=	Outside Chest Diameter of Valve Body
F=	Allowable Stress for material to be taken form ASME SEC. II - D for corresponding temperature in degree C
C=	Minimum Positive Tolerance for cast Steel = 5 mm

Chest Diameter 75.2 mm

Temp	Working Pressure for WCC in	Allowable Strees Value f in	Shell Thickenss T	Thickness as per drawing in
°C	Kg/cm² (g)	(Kg/cm²)	(mm)	mm
38	105.4	11.26	8.4	9.7
100	105.0	11.26	8.4	9.7
150	102.3	11.26	8.3	9.7
200	99.1	11.26	8.2	9.7
250	94.5	11.26	8.0	9.7
300	87.4	11.26	7.8	9.7
350	81.6	11.01	7.7	9.7
375	77.2	10.03	7.8	9.7
400	70.8	8.24	8.1	9.7

Valve Size : 1" Rating : 600 #
Drawing No : 2A99064
IBR No : 289
Description Body 1inch 600# Flanged

APPROVED
105/41 /289
Date : 06.05.2020

For Severn Glocon India Pvt Ltd,

Selvakumar.S
Assistant Manager - Product Engineering & Design

TUV INDIA PVT. LTD. TUV NORD GROUP
T.SAKTHIVEL
COMPETENT PERSON
CBB AUTHORIZATION No.07/W/2017
IBR-INSPECTING AUTHORITY

DRAWING NO

2A01236

THIRD ANGLE PROJECTION

IF IN DOUBT ASK

DO NOT SCALE THIS PRINT

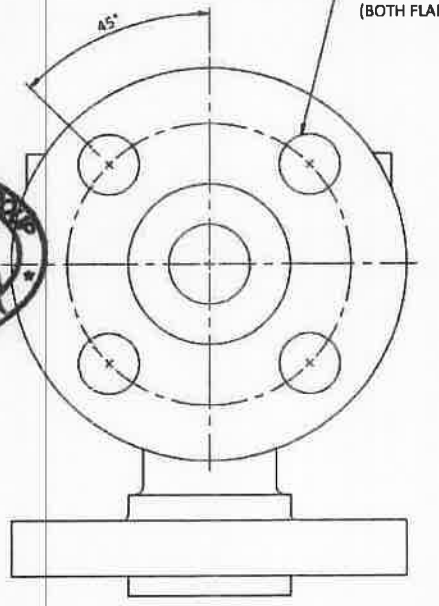
NOTE:
1. M/C FROM CASTING 2A99064.
2. THESE FACES TO BE SERRATED WITH A CONTINUOUS SPIRAL GROOVE GENERATED USING A 0.06" ROUND NOSED TOOL AT FEED OF APPROX. 0.02" PER REV3. DIAMETERS MARKED THUS # TO BE CONCEMTRIC WITHIN 0.002" TIR.
4. DIAMETERS MARKED THUS # TO BE SQUARE TO FACES "A" WITHIN 0.002" TIR.

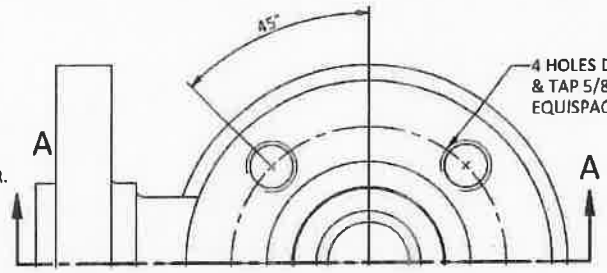
PART NO	USED ON	FLANGE FINISH
2A01236/1	STD VALVE	125 / 250 Ra SEE NOTE 2

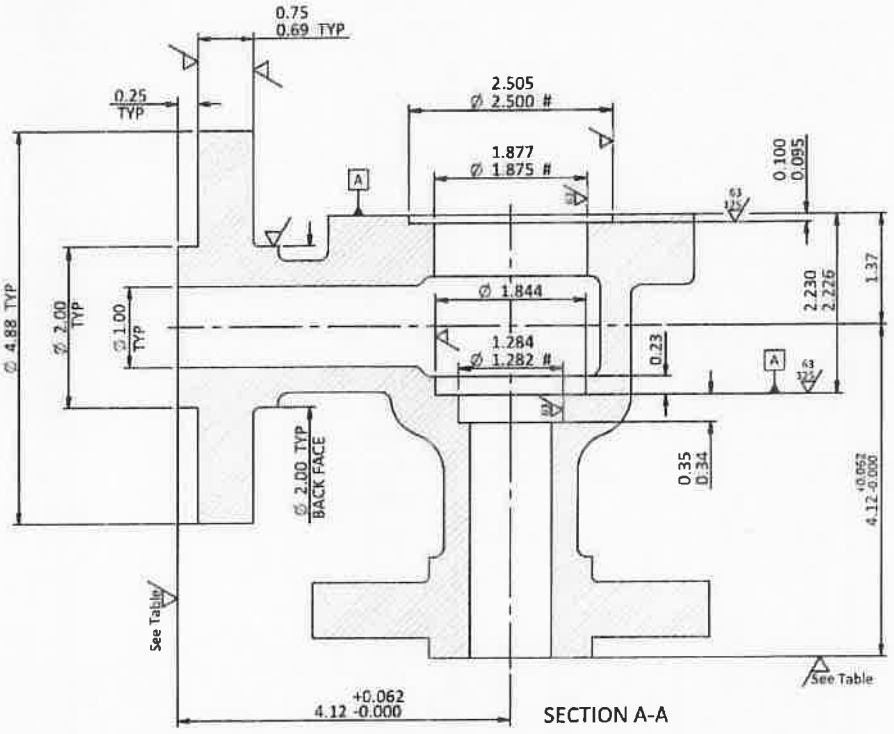
SELVAKUMAR S
Assistant Manager - Product Engg & Design
Severn Glocon India Pvt Ltd.
F96 & 97, SIPCOT Industrial Park,
Irungattukottai - 602 117.

APPROVED
105141289
Date : 06.05.2020

TUV INDIA PVT LTD-TUV NORD GROUP
T.SAKTHIVEL
COMPETENT PERSON
CRB AUTHORIZATION No:[illegible]
FOR INSPECTING AUTHORITY







SHEET NO: 1 OF 1

SEVERN GLOCON GROUP PLC
OLYMPUS PARK, QUEDGELEY,
GLOUCESTER, G12 4NF,
UNITED KINGDOM.
TEL: +44 (0)845 223 2040

UNLESS OTHERWISE STATED

.X	± 0.06	ALL DIMENSIONS IN INCHES
.XX	± 0.02	REMOVE SHARP EDGES
.XXX	± 0.005	ALL MACHINED SURFACES 125
ANGULAR	± 0.5°	

SEVERN GLOCON · INDIA
F-96&97, SIPCOT INDUSTRIAL PARK,
IRUNGATTUKOTTAI, SRIPERUMBUDUR,
TAMIL NADU, INDIA.
TEL: +91 (0)44 47104200

						TITLE	BODY M/C 1" ASME 600# RF, ANGLE	
1	NEW	MM1	RP	19.08.2019	DRAWN	MEERA	SIZE A3	SIMILAR TO 211282/1
ISS	ECO No	DRN	CKD	DATE	DATE	19.08.2019		
CHANGE RECORD					CHECKED	PRIYA	DRAWING NO	ISS 1
PERFORM ALL CHANGES ON CAD					DATE	19.08.2019	2A01236	
SOLID EDGE		WEIGHT	SCALE		APPROVED	SELVA		
		6.06 kg	NTS		DATE	19.08.2019		

SEVERN GLOCON INDIA PRIVATE LIMITED
F 96 & 97 SIPCOT INDUSTRIAL ESTATE, IRUNGATTUKOTTAI
CHENNAI - 602 117

FORM III C

CERTIFICATE OF MANUFACTURE AND TEST OF BOILER MOUNTINGS AND FITTINGS.
(Regulation 4G)

TC No.	520	Date	05/10/2020
Intended Working Pressure in Kg/Cm2 (g)	105.4	Hydraulic Test Pressure in Kg/Cm^2 (g)	159
Name of Parts :- **CAST ALLOY STEEL GLOBE TYPE CONTROL VALVE**		Main Dimensions	3" Class 600
		Body Material	ASTM A217 Gr. WC6
Maker's Name and Address : **SEVERN GLOCON INDIA PRIVATE LIMITED** F 96 & 97 SIPCOT INDUSTRIAL ESTATE, CHENNAI - 602 117		Assembly Drawing No.	SGI/IBR-281

Customer Name And Address : **Indian Oil Corporation Limited, BS VI Project, PO Paradip Refinery, Jagatsingpur, Odisha, Paradip- 754141**

MAXIMUM PARAMETERS OF MEDIA FOR WHICH THE VALVE ~~/ FITTINGS~~ CAN BE USED

INTENDED WORKING TEMP. OF MEDIA IN °C	38	100	150	200	250	300	350	375	400	
PERMISSIBLE MAX WORKING PRESSURE IN Kg/Cm^2(g)	105.4	105	101.5	97.8	94.5	87.4	82	79.1	74.7	

HEAT No./ CODE	% CHEMICAL COMPOSITION								PHYSICAL TEST RESULT				
	C	Mn	Si	P	S	Cr	Mo	Ni	UTS Mpa	% E GL : 50mm	Bend Test AT 120°	Valve Serial No.	Qty
F3840	0.158	0.636	0.403	0.010	0.012	1.188	0.548	0.263	533	31.5	Passed	7714-004-001	1

TOTAL No. OF VALVES One

Other Tests: -

Raw Material:

Process of manufacture: Induction Melting

Fully Killed / Rimmed: -

Heat No	TC No. and Date	Specification	Name of the maker	Name on the Inspecting Authority
F3840	PKC/F3840/SG523 /1 03/09/2020	ASTM A217 Gr. WC6	Peekay Steel Castings (P) Ltd	Well Known foundry

CERTIFIED that the particulars entered herein by us are correct. The **valve** have been designed and constructed to comply with the **INDIAN BOILER REGULATIONS** for a working pressure of **105.4 Kg / cm2 (g) and maximum temperature of 400°C** and satisfactorily withstood a Hydraulic test using water ~~or kerosene or any other suitable liquid~~ to a pressure of **160 Kg / cm2 (g)** on the **05th Oct 2020** in the presence of our responsible representative whose signature is appended hereunder.

K.RAMESH KUMAR
DGM - Quality
Maker's Representative
(Name and Signature)

S.MANIVANNAN
General Manager - Operations
Maker
(Name and Signature)

IDENTIFICATION MARK :

The Parts have been stamped with the inspecting authority's official Stamp thus. on the body ~~/ cover~~ flange.

We have satisfied ourselves that valve ~~/ fitting~~ has been constructed and tested in accordance with the requirements of the **INDIAN BOILER REGULATIONS, 1950.** We further certify that the particulars entered herein are correct.

Name and Signature of the Inspecting Officer who witnessed the tests

Place : Chennai
Date : 05/10/2020

Name & Signature of the Inspecting Authority

Note: In case of valve chest made and tested by well known foundries or forges recognised by the central boiler board in the manner as laid down in regulation 4A to 4H listed in 'Appendix K' , particulars regarding the material as certified by them, in any form shall be noted in the appropriate columns or paragraphs in the Certificates and in case certificates from well known foundries or forges is produced, such certificates may be accepted in lieu of the Certificates from Inspection Authority in so far as it relates to the testing of material specified in the form.

Strike out which is not applicable

2013836, T1382631 7714-4-1

PK-QA-02-Rev.0

PEEKAY STEEL CASTINGS (P) LTD

4/242 Chinnamaddampalayam, Billichi Post, Coimbatore - 641 019
Email: info@pkcbe.co.in, Phone: 04254 - 271610

Form IIIF

Certificate of Manufacture and test of Castings (Regulations 73 to 80)

Customer:	Order No and Date	PO Line No	TCNo	PKC/F3840/SG523/1
Severn Glocon India Pvt Ltd	PO1924718 / 23/03/2020	2	Date	03-Sep-2020

F.P. No	Part Name	Item Code / Part No
SG523	BODY CASTING, 3" 600# RF GLOBE	2G99023-A1020-IBR1

Drawing No	No.of pieces
2G99023 ISS 1	1

Specification /Material
ASTM A217 Gr.ASTM A217 Gr.WC6 2020 & PTS RM004 ISS 1 & A1020

Poured Date : 21/05/2020

Heat treatment	Melting Process	State of Delivery
Normalising at 950°c soaked for 9 hours then open air cooled HT Cycle No:O4350 Dt:12/06/2020 Tempering at 720°c soaked for 10 hours then open air cooled. HT Cycle No:E7442 Dt:13/06/2020	INDUCTION	Unmachined Completed

Technical Inspection Service TUV India 22/9/20

Chemical Composition (%)

Element	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	W	Res
Min. Specified	0.050	0.500	...	...	...	1.000	...	0.450	...	...	...
Max. Specified	0.200	0.800	0.600	0.035	0.035	1.500	0.500	0.650	0.500	0.100	1.000
Heat No											
F3840	0.158	0.636	0.403	0.019	0.012	1.188	0.263	0.548	0.024	0.003	0.289

Heat Slnos: 5

Mechanical Properties	Yield Strength	Tensile Strength	% of Elongation		Reduction of Area	Hardness	Bend Test Angle at 120°	Impact value ISO V at 0°C in Joules			
			GL=50 mm	GL=62.5 mm				Single Value			Average
Min	275	485	20	...	35	...	D=3t				
Max	...	655	...	...	...	225					
Heat No	Mpa	Mpa	%	%	%	HBW		1	2	3	Avg
F3840	358	533	31.5	-	67.43	163.00	PASSED	...	...	...	...

Remarks:
Material confirm to :ASTM A217 Gr.WC6 2020 & PTS RM004 ISS 1 & A1020 & NACE MR 0175/NACE MR0103/ISO 15156.Castings are NO major welding carried out.Test bar as per Specification :ASTM A1067.Test as per specification :ASTM A370.
MPI testing carried out as per ASTM E709 & ASME B16.34 App.II,ASME Sec VIII Div.1 App.6 /MSS SP 53.
Visual inspection of casting: Satisfactory According to MSS-SP-55 & SGI/OP/130.
Dimensional inspection: Satisfactory According to Approved Drawing

Certified that the products supplied is free from Radioactive element or contamination
Foundry Identification : **PKC**

We here by declare that the items mentioned above have been tested and inspected in our presence and are found to be in accordance with drawings, specifications and satisfy the requirements of the INDIAN BOILER REGULATIONS 1950

K. Vijaya Kumar
Manager (Quality)
Makers Representative
Peekay Steel Castings (P) Ltd., Coimbatore - 19

PEEKAY STEEL CASTINGS (P) LTD. ★ CBE ★

Thilagarajan D
Manager (Production)
Makers
Peekay Steel Castings (P) Ltd., Coimbatore - 19

IBR WELLKNOWN FOUNDRY upto 1500 Kg/piece CBB No.310 Dated 13-Sep-2013, valid upto 10-Jul-2023

SEVERN GLOCON INDIA QUALITY | REVIEWED & ACCEPTED | SIGN / DATE A. THANGAM 22/9/20

774-4-1

SGI/IBR-281

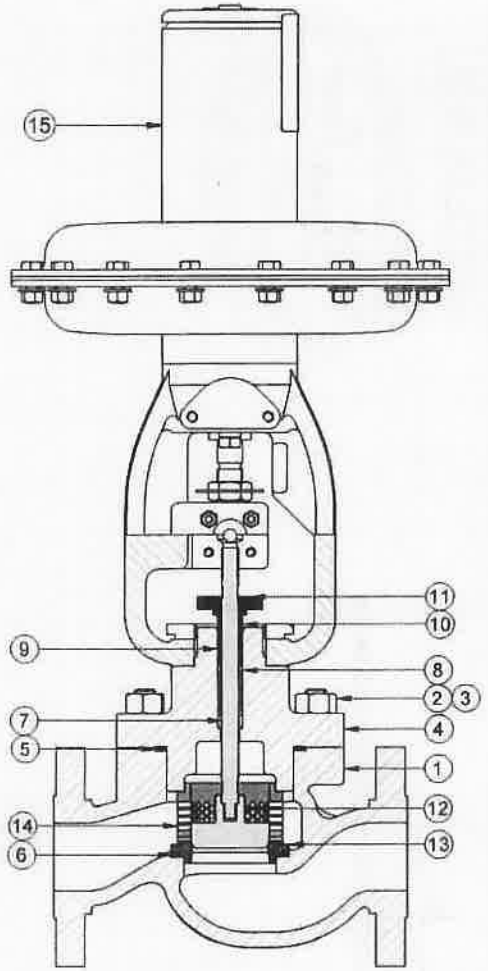


TABLE 1: PARTS LIST

ITEM NO	TITLE	MATERIAL	QTY	ITEM NO	TITLE	MATERIAL	QTY
1	BODY	ASTM A217 Gr. WC6	1	9	PACKING RING	Graphite	1
2	STUD	A193Gr B16	10	10	GLAND FOLLOWER	316 SS + STELLITE	1
3	NUT	A194Gr 7	10	11	GLAND FLANGE	316 SS	1
4	BONNET	ASTM A217 Gr. WC6	1	12	PLUG	316 SS + STELLITE	1
5	GASKET BODY	Spiral Wound 316L/Graphite	1	13	SEAT	316 SS + STELLITE	1
6	GASKET SEAT	Spiral Wound 316L/Graphite	1	14	CAGE	316 SS	1
7	PACKING GUIDE	SS 316/316L	1	15	ACTUATOR	CARBON STEEL	1
8	PACKING SPACER	SS 316/316L	1				

TABLE 2: PRESSURE TEMPERATURE CHART

Temperature	Working Pressure for 600# WC6	Hydro Pressure
°C	Kg/Cm² (g)	Kg/Cm² (g)
-29 to 38	105.4	159
100	105.0	-
150	101.5	-
200	97.8	-
250	94.5	-
300	87.4	-
350	82.0	-
375	79.1	-
400	74.7	-

TABLE 3: DRAWING DETAILS

Body Casting No	2G99023
Body Machining No	2G01021

SELVAKUMAR S
Assistant Manager - Product Engg & Design
Severn Glocon India Pvt Ltd
F96 & 97, SIPCOT Industrial Park,
Irungattukottai - 602 117

APPROVED
105/401 281
Date: 13.12.2019

TUV INDIA PVT LTD-TUV NORD GROUP
T. SAKTHIVEL
COMPETENT PERSON
CBB AUTHORIZATION No: 07/2017
IBR-INSPECTING AUTHORITY

NOTES :
1. DESIGN,MANUFACTURING,INSPECTION ARE AS PER IBR 1950.
2. ALL DIMENSIONS ARE IN INCHES

CHANGE RECORD

ISS NO	ECO No.	DATE	DRAWN	CHECKED	APPROVED
1	NA	11.12.2019	GOWTHAM	DEEPAN	SELVA

SEVERN GLOCON GROUP PLC

GENERAL ARRANGEMENT DRAWING

SEVERN GLOCON · INDIA

DRAWING NO	SGI/IBR-281
DESCRIPTION	3" 600# RF Globe Assembly

SGI/FR/DE/016B - Iss 1

SEVERN GLOCON · INDIA

Document No : WTC/IBR-281
Issue No : 1
Date : 11-12-2019

SHELL THICKNESS CALCULATION AS PER IBR 290-D

T = (WPxD)/(2f+WP)+C

Where

T =	Shell Thickness
WP=	Allowable Maximum Pressure for Service Temperature of Material
D=	Outside Chest Diameter of Valve Body
F=	Allowable Stress for material to be taken form ASME SEC. II - D for corresponding temperature in degree C
C=	Minimum Positive Tolerance for cast Steel = 5 mm

Chest Diameter 201.2 mm

Temp	Working Pressure for WC6 in	Allowable Strees Value f in	Shell Thickenss T	Thickness as per drawing in
°C	Kg/cm² (g)	(Kg/cm²)	(mm)	mm
38	105.4	11.26	14.0	17.8
100	105.0	11.26	14.0	17.8
150	101.5	11.26	13.7	17.8
200	97.8	11.26	13.4	17.8
250	94.5	11.26	13.1	17.8
300	87.4	11.26	12.5	17.8
350	82.0	11.26	12.1	17.8
375	79.1	11.26	11.8	17.8
400	74.7	11.09	11.6	17.8

Valve Size : 3" Rating : 600 #
Drawing No : 2G99023
IBR No : IBR 281
Body 3inch 600# Flanged

APPROVED
105/40/281
Date : 13.12.2019

For Severn Glocon India Pvt Ltd,

Selvakumar.S
Assistant Manager - Product Engineering & Design

TUV INDIA PVT LTD-TUV NORD GROUP
T. SAKTHIVEL
COMPETENT PERSON
CBR AUTHORIZATION No: 0/102/2015
IBR-INSPECTING AUTHORITY

DRAWING NO

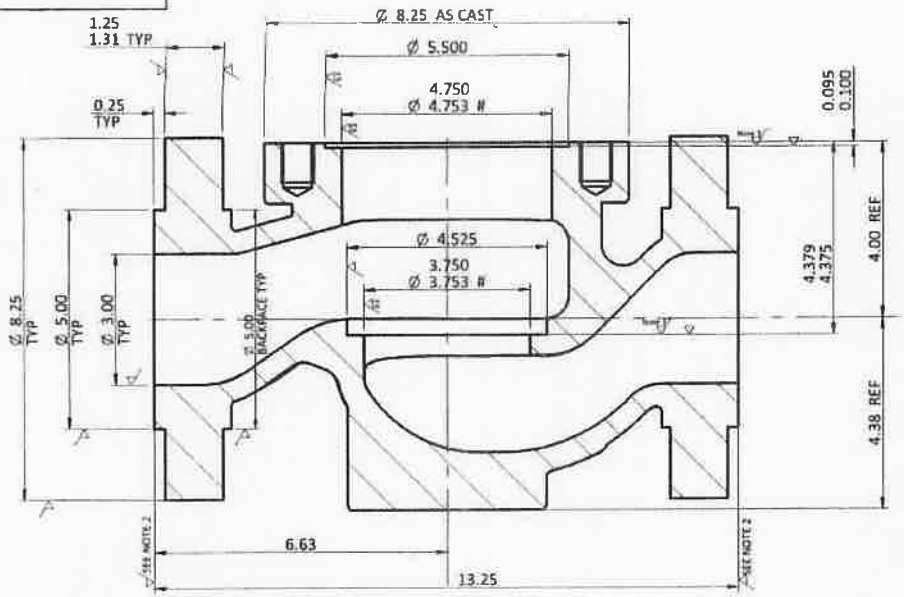
2G01021

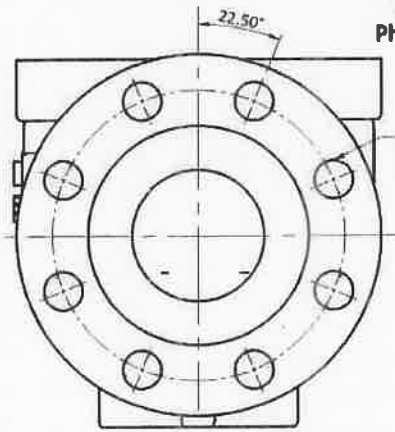
THIRD ANGLE PROJECTION

IF IN DOUBT ASK

DO NOT SCALE THIS PRINT

SEVERN GLOCON INDIA PVT. LTD.
F 96 & 97, SIPCOT Industrial Estate,
Irungattukottai, Sriperumbuthur TK,
Kanchipuram Dist. - 602 117
Ph : 044 - 4710 4200. Fax : 044 - 4710 4503





APPROVED
105/40/281
Date : 13.12.2019

TUV INDIA PVT. LTD.-TUV NORD GROUP
T. SAKTHIVEL
COMPETENT PERSON
CSD AUTHORIZATION No: 07/2017
ISR-INSPECTING AUTHORITY

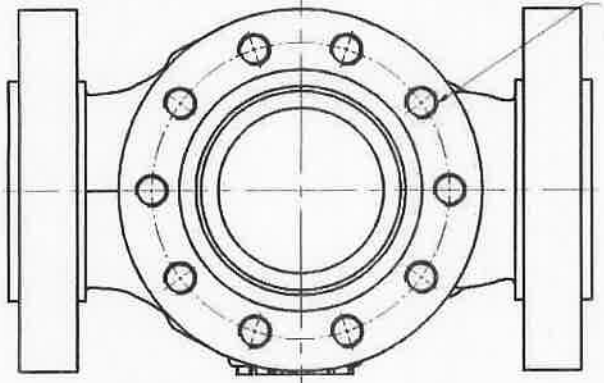


TABLE-1	
Part Code	Serration
2G01021/1	63-125 Ra
2G01021/2	125-250 Ra

NOTES:

1. M/C FROM CASTING 2G99023.
2. THESE FACES TO BE SERRATED WITH A CONTINUOUS SPIRAL GROOVE GENERATED USING A 0.06"R. ROUND NOSED TOOL AT A FEED OF APPROX. 0.02" PER REV. RESULTANT TEXTURE = REFER TABLE-1.
3. THESE FACES TO BE SERRATED WITH A CONTINUOUS SPIRAL GROOVE GENERATED USING A 0.06"R ROUND NOSED TOOL AT A FEED OF APPROX. 0.02" PER REV. RESULTANT TEXTURE = 63/125 Ra.
4. DIAMETERS MARKED THUS # TO BE CONCENTRIC WITHIN 0.002" TIR.
5. DIAMETERS MARKED THUS # TO BE SQUARE TO FACES WITHIN 0.002" TIR.
6. KEEP MINIMUM FLANGE THICKNESS TO PREVENT NUT FOULING.

SEVERN GLOCON GROUP PLC
OLYMPUS PARK, QUEDGELEY,
GLOUCESTER, GL2 4NF,
UNITED KINGDOM.
TEL: +44 (0)845 223 2040

UNLESS OTHERWISE STATED

.X	± 0.06	ALL DIMENSIONS IN INCHES
.XX	± 0.02	REMOVE SHARP EDGES 125
.XXX	± 0.005	ALL MACHINED SURFACES
ANGULAR	± 0.5°	

SEVERN GLOCON • INDIA
F-96&97, SIPCOT INDUSTRIAL PARK,
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ISS	ECO No	DRN	CKD	DATE
1	NEW	NAS	ADK	21.04.2018

CHANGE RECORD

PERFORM ALL CHANGES ON CAD

SOLID EDGE

WEIGHT: 37.03 kg

SCALE: NTS

TITLE: Body M/C , 3" 600# RF Globe

DRAWN	NASREEN	21.04.2018
DATE		
CKD	KUMAR	21.04.2018
DATE		
APP	SELVA	21.04.2018
DATE		

SIZE: A4

SIMILAR TO: G0331101

DRAWING NO: 2G01021

ISS: 1

SGI/FR/DE/005G - Iss 1