
 中海油石化工程有限公司 CNOOC Petrochemical Engineering Co., Ltd.	<b>SPECIFICATION FOR MANUAL VALVES</b>	Owner Doc.No.	CMIT-240048-728-PIP-15.03-3002	
		Job's Doc. No.	253001D0728MP00S02	
		Phase	Detailed Design	
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Company:		 <b>CMIT</b> CNOOC IRAQ LIMITED CNOOC.MOC.IDC.TPAO		
Project:		FQN NEW DEGASSING STATION UPGRADING PROJECT		
Unit:		FQN DEGASSING STATION		
Contract No.:		CMIT-PRT-10.53-240048		


Discipline: PIP

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DOCUMENT REVISION HISTORY SHEET

REV	DATE	REVISION DETAILS
A	24/06/2025	First issue

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## 1. GENERAL

MISSAN Oil Field is located in the SE of Iraq, close to Iran's border, about 175 km N-NW of BASRA City, and 350 km SE of Baghdad – the capital of Iraq.

MISSAN Oil Field includes three producing fields namely Abu GHIRAB, BUZURGAN and FAUQI. Abu GHIRAB and FAUQI fields extend beyond the Iranian border.

Since MISSAN Oil Field was built in 1976, it has suffered from the Iran-Iraq War and the Iraq War, so a lot of facilities needs to be upgraded and revamped.

The intended project is mainly concerned for New Degassing Station Upgrade in FQN.

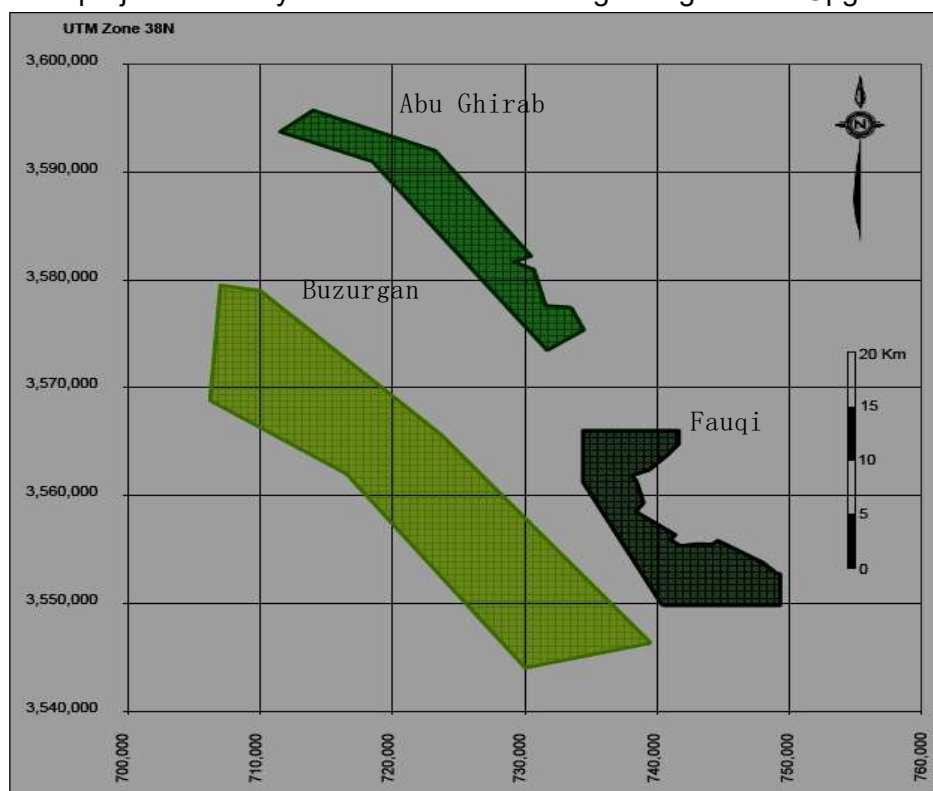



Figure 1.1-1 The overall MISSAN Oil Field

General Field Layout is shown in below figure:

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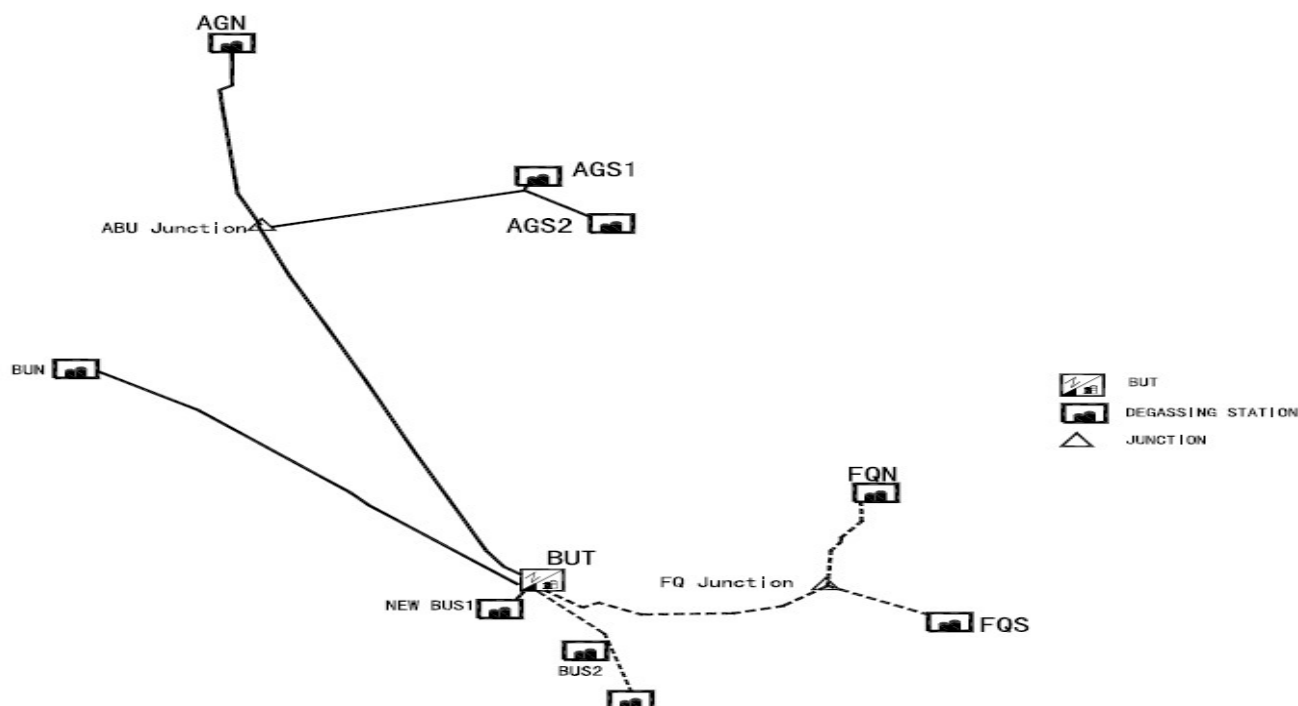


Figure 1.1-2 General Field Layout

### 1.1. Degassing Station (DS):

The FQN degassing station was built in 1976, the crude oil with gas and water was sent to the DS, the main target for DS is to separate the gas and water from crude oil, and to entirely test/meter each individual well from well pad. Separated Liquid and Gas are exported via individual Trunkline(s) to the BUT CPF located in Buzurgan Area for further processing and treatment.

Due to the increase of liquid from the well, the existing facilities of FQN can not meet the requirement, so two Crude Processing Trains (50 Kbb/d plus 20% (each)) will be added in FQN degassing station, and other Utilities and Auxiliary Supporting Systems will be added too.


### 1.2. Abbreviation and Acronyms

The following definitions shall apply to this document:

**COMPANY:** CNOOC IRAQ LIMITED

**PMC:** Project Management Consultant

**CONTRACTOR :** CNOOC Petrochemical Engineering Co., Ltd (COPCL or CNOOCPEC).

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**DGS** or **DS**: Degassing Station

**VENDOR**: Party(ies), which manufactures and/or supplies material, equipment and service to perform the duties as specified by Contractor in the scope of supply

### 1.3. Scope

This specification covers the minimum requirements for manual valves used in the FQN degassing station and facilities, whether field or shop installed.

The intent of this specification is to serve as a guideline for valve selection, but not to limit the choice of valves required for special service conditions and use of new or unique valve technology. The design of wellheads and flowlines is not included in the scope of work.

## 2. CODES, REGULATIONS, STANDARDS


### 2.1. Codes and Standards

The following Section contains lists of International, and project specifications which have been reviewed for extracts or referred to within this specification document.

VENDOR shall meet or exceed the requirements of the latest edition of all applicable Codes, Regulations and Standards, except as superseded herein. In cases where more than one code, regulation or standard apply to the same condition, the most stringent shall be followed. In the event of a conflict between this specification and other specifications or correspondence, the COMPANY shall be consulted and a ruling, in writing, shall be obtained before any work is started.

#### ASME Standards

ASME Boiler and Pressure Vessel Code, all applicable sections	
ASME B16.34	Valves - Flanged, Threaded, and Welding End
ASME B31.3	Process Piping
ASME B16.5	Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 Metric/Inch Standard
ASME B16.47	Large Diameter Steel Flanges NPS 26 Through NPS 60 Metric/Inch Standard

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ASME B16.10	Face-to-Face and End-to-End Dimensions of Valves
ASME B16.11	Forged Fittings, Socket-Welding and Threaded
ASME B1.20.1	Pipe Threads, General Purpose (Inch)

#### ASTM Standards

ASTM A105/ A105M	Standard Specification for Carbon Steel Forgings for Piping Applications
ASTM A182/ A182M	Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service
ASTM A193/ A193M	Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications
ASTM A194/ A194M	Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both
ASTM A216/ A216M	Standard Specification for Steel Castings, Carbon, Suitable for Fusion Welding, for High-Temperature Service
ASTM A320/ A320M	Standard Specification for Alloy-Steel and Stainless Steel Bolting for Low-Temperature Service
ASTM A890/ A890M	Standard Specification for Castings, Iron-Chromium-Nickel-Molybdenum Corrosion Resistant, Duplex (Austenitic/Ferritic) for General Application

#### API Standards

API STD 594	Check Valves: Flanged, Lug, Wafer, Butt-welding
API STD 598	Valve Inspection and Testing
API STD 600	Steel Gate Valves - Flanged and Butt-welding ends, Bolted Bonnets
API STD 602	Gate, Globe, and Check Valves for Sizes NPS 4 (DN 100) and

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	Smaller for the Petroleum and Natural Gas Industries
API STD 607	Fire Test for Quarter-turn Valves and Valves Equipped with Nonmetallic Seats
API STD 608	Metal Ball Valves - Flanged, Threaded, and Welding Ends
API STD 609	Butterfly Valves: Double-Flanged, Lug-and Wafer-type
API STD 623	Steel Globe Valves-Flanged and Buttwelding Ends, Bolted Bonnets
API SPEC 6FA	Specification for Fire Test for Valves
API SPEC 6D	Specification for Valves


#### MSS-SP Standards

MSS SP-25	Standard Marking System for Valves, Fittings, Flanges and Unions
MSS SP-45	Bypass and Drain Connections
MSS SP-55	Quality Standard for Steel Castings for Valves, Flanges and Fittings and Other Piping Components - Visual Method for Evaluation of Surface Irregularities
MSS SP-67	Butterfly Valves
MSS SP-68	High Pressure Butterfly Valves with Offset Design
MSS SP-117	Bellows Seals for Globe and Gate Valves

#### NACE Standards

NACE MR0175 / ISO 15156	Petroleum and Natural Gas Industries - Materials for Use in H <sub>2</sub> S-containing Environments in Oil and Gas Production
NACE MR0103 / ISO 17945	Petroleum, Petrochemical and Natural Gas Industries - Metallic Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments
NACE TM0177	Laboratory Testing of Metals for Resistance to Sulfide Stress Cracking and Stress Corrosion Cracking in H <sub>2</sub> S Environments
NACE TM0284	Evaluation of Pipeline and Pressure Vessel Steels for Resistance to Hydrogen-Induced Cracking



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### ISO Standards

ISO 10497	Testing of Valves - Fire Type-Testing Requirements
ISO 17292	Metal Ball Valves for Petroleum, Petrochemical and Allied Industries

### BS Standards

BS EN 10204	Metallic Products - Types of Inspection Documents
BS EN 12266	Industrial Valves - Testing of Metallic Valves

Note: This list covers the majority of references, but it is not exhaustive.

## **2.2. Reference Documents**

The following General Specifications shall be used in conjunction with this specification where applicable:


CMIT-240048-728-PCS-15.69-0001	DESIGN BASIS
CMIT-240048-728-PIP-15.03-3001	SPECIFICATION FOR PROCESS PIPING MATERIALS
CMIT-240048-728-PAI-15.03-3001	SPECIFICATION FOR PAINTING
CMIT-240048-728-PAI-15.03-3002	SPECIFICATION FOR COLOUR OF EXTERNAL PAINTING
CMIT-240048-728-PIP-15.70-3001	MATERIAL SELECTION REPORT

Some requirements in this specification may be modified by specific requirements in the Purchase Specification. In case of conflict, the specific requirements supersede this specification.

Any deviation from this specification must be approved, in writing, by COMPANY. Such written approval must be obtained prior to the commencement of any work which would constitute such a deviation.

## **2.3. Order of Precedence**

All conflicts between the requirements of this specification, related contract documents national/ international documents, codes, engineering practices and the requisition shall be

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referred to COMPANY/CONTRACTOR for clarification. Should any conflict occur in the application of these specifications, the order of precedence shall be as follows:

- 1) Iraqi Laws and Regulations;
- 2) PURCHASE Order (including attachments) and variations thereon;
- 3) Data sheets and drawings;
- 4) This Technical Specification;
- 5) Project Specification in conjunction with native standard;
- 6) International codes and standards.

### 3. GENERAL

#### 3.1. General

All materials and installation shall be in accordance with code requirements and industry standards for good workmanship.

All materials used in sour service shall meet the requirements of NACE MR0175 /ISO15156 and relevant project specification. All materials chemical composition and treatment, testing shall be carried out according to the related section of the standard NACE MR0175 /ISO 15156.

No Valves of Brass, Aluminium, Cast Iron, Malleable Iron, Steel Iron or Semi Steel shall be used in the Hydrocarbon service.

#### 3.2. Valve Identification

Each valve in a facility shall be designated by a descriptive valve identification number consisting of the following identifiers:


Nominal Valve Size (inches NPS)

Valve Type

Piping Class Code

Valve Style

S (NACE TAGGED)

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E.G. 10"-BA-1D3-1S, specifies:

10" -----Nominal valve size.

BA -----Valve Type (Ball Valve).

1A1 -----Piping Class Code (See APPENDIX A)

1 -----Valve Sequence Number

S -----NACE Tagged.

Valve Type:

BA - Ball    BT - Butterfly    CK – Check    GA - Gate    GL - Globe    PL-Plug

### 3.3. Valve Tagging

Each valve shall be supplied with a metal tag permanently attached to the valve, and stamped with the valve code number. Other special information, such as type of internal coating, shall also be identified on the metal tag.


## 4. DESIGN

4.1 Flanged Gate valves 2" and larger shall meet the requirements of ASME B16.34 and API 600. Screwed valves smaller than 2" shall meet the requirements of API 602.

4.2 Valves may be cast or forged steel depending upon the operating conditions. In critical service forged valves are preferred.

4.3 Materials shall be selected based on the specific service and the requirements on relevant datasheets unless otherwise specified by COMPANY. For sour services Material shall be selected based on CMIT-240048-728-PIP-15.03-3001\_Specification for Piping Material and NACE MR0175 /ISO 15156 latest edition.

4.4 Globe and gate valves shall have outside stem and yoke with bolted bonnets. Bonnets on check valves shall be bolted. Screwed bonnets or union bonnets shall not be used. Bonnet bolts shall be ASTM A193-B7M or higher subject to sour service. On all check and globe valves, the direction of flow shall be cast, stamped or forged on the valve body. For Trim Material of respective tags refer individual valve tag data sheets.

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4.5 Trim materials shall conform to API 600, Table 8 and be suitable for the proposed service. For valves specified under API 602, other trim materials may be used subject to written approval of COMPANY. Trim materials, particularly stainless steels, should be selected to prevent galling. Low melting point alloys shall not be used.

4.6 Valves deemed critical to the facility shutdown and blow down shall have fireproof design according to API 607 /ISO 10497 or API 6FA /ISO 10497.

4.7 Ball valves are preferred for block valves. Ball valves for hydrocarbon liquid or vapour services shall be fire safe.

4.8 In higher temperature services, steel gate valves are recommended. Plug valves are not recommended in services exceeding 175°C and may not be used without COMPANY specific approval.

For heating medium oil system, the design temperature is 300°C. Based on the property of heating medium oil, bellow type globe valve was chosen in this condition and asbestos shall not be as sealing material.


For steam line, material choosing shall be suitable for the high temperature condition.

For the high temperature sour gas piping system, the working temperature is 330°C, material choosing shall be suitable for the high temperature and anti-sulphur material shall be selected based on the working condition according to the standard NACE MR0175 /ISO 15156 (latest edition).

4.9 Cast iron, semi-steel or ductile iron valves may not be used without COMPANY specific approval.

4.10 Sour service valves shall meet the requirements of NACE MR0175 /ISO 15156 (latest edition). For Cast or wrought alloys UNS S41000 (A182 F6a) shall have a maximum hardness of 22HRC and shall be:

- 1) Austenitized and quenched or air-cooled;
- 2) Tempered at 621°C (1150°F) minimum, then cooled to ambient temperature;
- 3) Tempered at 621°C (1150°F) minimum, but lower than the first tempering temperature, then cooled to ambient temperature.

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4.11 The type of coating for internally coated valves shall be specified for each project and service by the project engineer and shown on the P&ID.

4.12 Ball Valves in Hydro Carbon Service shall be of Fire Safe Design with secondary metal to metal seat in addition to the primary resilient seat.

4.13 Gear operators shall be provided as required by the Specification for valves.

4.14 Unless otherwise specified in the Valve design code, Valves with mass 250kg and above shall be provided with lifting lugs. Tapped holes and eye bolts shall not be used for lifting lugs.

4.15 Uni-directional valves or valves with a preferred direction of flow shall have a flow direction arrow cast or stamped on the body.

4.16 All Valves having external threads on the Gear Operator, Gland, etc shall be provided with a suitable Sand Protection device.

4.17 The minimum wall thickness of the valve body and other pressure containing parts and the valve pressure-temperature rating shall be in accordance with ASME B16.34 taking into account the corrosion allowance.

4.18 Forged bodies shall be forged close to final shape. Rolled bar are not acceptable.

4.19 All soft seated valves shall be provided with anti-static design for electrical continuity between the main valve parts (ball/disc) and body and shall be equipped with a spring or spring loaded pin to provide earthing.


4.20 Unless noted otherwise, seat/ seat insert shall be renewable for flanged valves.

4.21 All valves shall be long/ regular pattern type; short pattern valves are not acceptable.

4.22 Face to face dimensions shall conform to ASME B16.10 or applicable valve design code.

4.23 All soft seated valves shall be 100% leak tight.

4.24 End flanges up to 24 inch shall be as per ASME B16.5, flanges 26 inch and above shall be in accordance with ASME B16.47 Series "A" Flanges & MSS SP 44.

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Threaded connections shall comply with ASME B1.20.1, NPT, and socket weld connection shall comply with ASME B16.11. Small steel threaded and socket weld end valves that are accessories to the main valve shall have a minimum body rating equivalent to API 602.

4.25 All socket weld valves shall have high temperature packing designed to resist heat generation during welding.

4.26 Forged bodies, end adapters, extended bonnets and other forged components shall be forged close to their final shape. Repair of forged valve body by welding or weld overlays are not acceptable.

4.27 The end connections of valves shall be in accordance with the applicable valve datasheet. The end flanges shall be integrally cast or forged with the valve body.

4.28 Stem shall be one piece solid construction and anti-blow out design, either cast or forged. Welded construction is not acceptable. The stem weakest point shall be outside the valve body cavity. Stem fabricated from bar stock is not acceptable. Screwed connection between stem and closure member is not acceptable.

4.29 Valves shall be provided with bolted glands unless noted otherwise.


4.30 Soft seat and seal materials shall be validated for suitability against the maximum class rated differential pressure across the valve seats in closed position.

4.31 Metallic body gaskets shall have corrosion resistance equal to the body and bonnet and shall be suitable for the process design conditions.

4.32 The valve operators shall be capable to produce 1.25 times the maximum torque required to operate the valve under the worst design condition. The maximum design operating force shall not exceed 350 N.

4.33 Valve hand wheels, including gear operators shall be permanently marked with the word "OPEN" or "CLOSE" with a permanent arrow indicating the direction of rotation. The hand wheel diameter shall not exceed the valve face-to-face dimension, the direction of operation of the hand wheel shall be in a clock-wise direction for closing the Valves.

4.34 The gear operator shall be of a self-locking type. The gearbox shall have the same fire safe rating as the valve. The gearbox shall be provided with a closure member position indicator.

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4.35 Mounting brackets for gearboxes shall be fabricated from carbon steel or ductile iron. All valve actuators mechanisms (including hand-wheel, level, gear and power) shall be sized for full rated differential pressure.

4.36 Bolting for valves shall be in accordance with the project Piping Material Specification as applicable.

Nuts shall be double chamfered and heavy hexagonal type. The head of machine head bolts shall be heavy hexagonal type.

Studs shall be threaded full length. The length of thread engagement between each bolts (or stud) and the body shall be at least equal to the nominal diameter of the bolt.

Material of Bonnet bolts and nuts shall be ASTM A193-B7/ A194-2H for carbon steel, A320-B8M/ A194-8M for austenitic stainless steel, A193-B7M/ A194-2HM for carbon steel and duplex stainless steel in sour service.

All bolts and nuts shall be coated as per piping material specification.

## 5. INSTALLATION

5.1 Wherever possible, valves should be installed in a position easily to be operated.

5.2 Hand wheels and stems shall be kept out of operating aisles, where practical, otherwise elevated to 2100 mm from grade to bottom of hand wheel.


5.3 Valves shall not be installed with stems below a horizontal position.

5.4 Block valves, when required, shall be installed at nozzles of pressure vessels or in lines connected to nozzles to permit operating valves from grade or a platform. Equipment shall be capable of being isolated if:

- Operations can continue without it.
- Depressurizing associated facilities will delay maintenance on the equipment.

5.5 All valves shall have sufficient clearance to facilitate removal of the bonnets, plugs and internals.

5.6 Ball valves shall not be used for throttling service.

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## 6. VALVE SELECTION

Valves shall be selected in accordance with the application and service conditions in which the valve is placed.

The selection for valve used for high sour services and high temperature shall be paid more attention by manufacture.

## 7. PAINTING

Valves shall be painted in accordance with CMIT-240048-728-PAI-15.03-3001\_SPECIFICATION FOR PAINTING & CMIT-240048-728-PAI-15.03-3002\_SPECIFICATION FOR COLOUR OF EXTERNAL PAINTING.

## 8. INSPECTION AND TESTING

8.1 The valve manufacturer shall examine each valve to assure compliance to ISO 17292, API 6D, API 602, API 600, API 623, API 594, API 609, ASME B16.34.

8.2 Each valve shall be subject to size inspection, and the end size and deviation shall meet the requirements of ASME B16.5, B16.25, B16.11, and B16.10.

8.3 Unless otherwise specified, all valves shall be inspected by manufacturer in accordance with API 598.

8.4 The shell test and closure test are required for all valves in terms of requirements of API598. Moreover, the backseat test is required for valves with backseat.


8.5 The hydraulic test shall be performed by manufacturer after valve assembling, and all parts and accessories shall contain pressure. In the hydraulic test, the closure torque shall be acquired by hand for manually actuated valves and gear actuated valves.

8.6 For austenitic stainless steel valves, the chlorine content of water used in the test shall be less than 25ppm. Valves must drain off after the hydraulic test and shall be dried by dry air or nitrogen.

## 9. MARKING

9.1 The marking shall conform to MSS SP-25 & ASME B16.34 unless otherwise specified, and shall include marking of Nominal Size, Wall Thickness/Schedule Number (for butt welding



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valve), material & standard, pressure rating, charge/heat No., manufacturer or trademark and commodity code or model number in purchase order of valves.

9.2 Valves installed according to the flow direction should have arrows cast or stamped on the valve body to indicate the flow direction. Painted arrows are not allowed.

9.3 When it is necessary to mark the pressure-bearing parts of the valve, the same "low-stress" impression should be used as the material to be marked, and the impression should not exceed the minimum wall thickness nor produce sharp discontinuities.

## 10. PACKING AND SHIPPING

10.1 All valves should be packaged in accordance with the requirements of shipping export packaging standards.

10.2 Gate and global valves should be transported in the closed position. Plug and ball valves should be transported in the open position.

10.3 When the valve is transported, the correct stem packing should be installed and the gland should be tightened to prevent leakage during use.

10.4 After inspection and testing, the water that may be trapped in the valve cavity should be removed, kept dry and ready for shipping.


10.5 Austenitic stainless steel valves shall avoid chlorine corrosion (such as sea water) in shipping.

10.6 Blind flanges shall be used at both ends of the valve to protect the flange sealing surface, the welding end or the threaded end and the inside of the valve. The blind flanges should be made of wood, wood fiberboard, plastic, metal, etc., and fixed with bolts, steel clips or locking devices, and should be easy to assemble and disassemble.

10.7 Stainless steel valves and carbon steel valves shall be packed separately.

10.8 The appropriate protection measures shall be taken against mechanical damage and atmospheric corrosion in transportation.

10.9 When packing valves, they should be packed according to Tag Number or Project regulations.

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10.10 Rust prevention treatment shall be performed for exposed parts, such as machined surfaces, bolts and inner metal surface.

## 11. VENDOR DOCUMENTATION

### 11.1. General

All VENDOR documents shall be submitted in English.

VENDOR shall submit VENDOR Document Schedule listing all the drawings and documents to be submitted for COMPANY's review and approval with anticipated dates for submission.

VENDOR shall include in the VENDOR Document Schedule additional drawings/ documents not specifically listed, but deemed to be of value.

VENDOR shall submit the Manufacturers Data Book, comprising of all drawings and documents submitted throughout the Project in electronic format.

COMPANY's approval of VENDOR drawings/ documents does not free the VENDOR from his responsibility to produce a working system complying with the intent of the requisition, specification and attached documentation.

COMPANY agreed VENDOR list shall be followed for procurement purpose.


### 11.2. Material certificates

Mechanical properties as yield strength, material composition, impact test etc. shall be confirmed by acceptance test certificate 3.1 in accordance with BS EN 10204.

Results of non-destructive inspections shall be documented at least by means of an acceptance test certificate 3.1 in accordance with BS EN 10204.

Dimension check shall be recorded in the report and certified at least by means of an acceptance test certificate 3.1 in accordance with BS EN 10204.


The pressure test shall be certified on acceptance certificate 3.1 in accordance with BS EN 10204.

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### 11.3. Test Certificates and Test Documentation


The test certificates for each mechanical and / or performance test shall be furnished including hydrostatic test certificates.

VENDOR shall supply test documentation in accordance with the specifications covering all the tests which are to be performed.


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## **APPENDIX A**

### **PIPING CLASSES SPECIFICATIONS**

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APPENDIX A PIPING CLASSES SPECIFICATIONS						
Class	Service	Rating	Material	C.A. (mm)	Design Pressure	Design Temperature Limits
1A1	Utility Air	150#	ASTM A106 Gr.B	1	1.2MPa	-20 ~ 85°C
	Fuel Gas					
	Nitrogen Gas					
	Natural Gas					
	Diesel					
1A4	Waste Water	150#	ASTM A106 Gr.B	4	1.0MPa	-20 ~ 99°C
1C0	Chemical	150#	ASTM A312 TP316L	0	0.6MPa	-20 ~ 100°C
1D3	Closed Drain	150#	ASTM A106 Gr.B (SSC&HIC)	3	0.6MPa	-20 ~ 100°C
	Sour Gas/Sour Water					
	Atmospheric Vent					
	High Pressure Flare					
	Low Pressure Flare					
	Hydrocarbon Liquid (Sour)					
	Fuel Gas					
	Off-spec Oil					
1D6	Crude Oil (Sour)	150#	ASTM A106 Gr.B (SSC&HIC)	6	1.6MPa	-20 ~ 100°C
	Sour Gas					
1G0	Instrument Air	150#	ASTM A106 Gr.B +GALV	0	1.0MPa	-20 ~ 80°C
1G3	Fire Water	150#	ASTM A106 Gr.B +GALV	3	1.1MPa	-20 ~ 40°C
1L0	Oily Water	150#	ASTM A790 S32760/ A928 S32760	0	1.2MPa	-20 ~ 125°C

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APPENDIX A PIPING CLASSES SPECIFICATIONS						
Class	Service	Rating	Material	C.A. (mm)	Design Pressure	Design Temperature Limits
1N0	Oily Water	150#	ASTM A790 S31803/ A928 S31803	0	1.8MPa	-20 ~ 65°C
1P0	Oily Water	150#	GRE Epoxy Resins API SPEC 15LR	0	1.8MPa	0 ~ 65°C
1V0	RO Water	150#	PE 4710, ASTM D3350 SDR7.0	0	1.2MPa	0 ~ 65°C
	Other Chemical injection					
3C0	Chemical	300#	ASTM A312 TP316L	0	2.2MPa	-20 ~ 100°C
3D3	Sour Gas	300#	ASTM A106 Gr.B (SSC&HIC)	3	2.2MPa	-20 ~ 100°C
	Hydrocarbon Liquid					
3D6	Crude Oil(Sour)	300#	ASTM A106 Gr.B (SSC&HIC)	6	4MPa	-20 ~ 125°C
	Sour Gas					
3L0	Oily Water	300#	ASTM A790 S32760/ A928 S32760	0	2.2MPa	-20 ~ 100°C
3N0	Oily Water	300#	ASTM A790 S31803/ A928 S31803	0	4MPa	-20 ~ 65°C
3P0	Water Injection	300#	GRE Epoxy Resins API SPEC 15LR	0	4MPa	0 ~ 65°C
	Oily Water					


Notes:

1. Piping Classes listed in Appendix A is for related system based on the design conditions supplied by process.
2. The Service & Design Pressure & Design Temperature will be updated according to Line List.

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## **APPENDIX B**

### **VALVE'S TAG NO**


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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
1A1	1/2"-1 1/2"	SW/FB	BA-1A11
	1/2"-1 1/2"	RF/FB	BA-1A12
	2"-4"	RF/FB	BA-1A13
	6"-18"	RF/FB	BA-1A14
	2"-4"	RF/RB	BA-1A15
	6"-18"	RF/RB	BA-1A16
	1/2"-1 1/2"	SW/Wedge	GA-1A11
	1/2"-1 1/2"	RF/Wedge	GA-1A12
	2"-8"	RF/Wedge	GA-1A13
	2"-8"	RF/Flat	GA-1A14
	10"-18"	RF/Wedge	GA-1A15
	10"-18"	RF/Flat	GA-1A16
	1/2"-1 1/2"	RF	GL-1A11
	2"-6"	RF	GL-1A12
	8"-16"	RF	GL-1A13
	1/2"-1 1/2"	RF/Lift	CK-1A11
	2"-18"	RF/Wafer	CK-1A12
	6"	RF	BT-1A11
	8"-18"	RF	BT-1A12
1A4	1/2"-1 1/2"	RF/FB	BA-1A41
	2"-4"	RF/FB	BA-1A42
	6"-18"	RF/FB	BA-1A43
	2"-4"	RF/RB	BA-1A44
	6"-18"	RF/RB	BA-1A45
	1/2"-1 1/2"	RF/Wedge	GA-1A41
	2"-8"	RF/Wedge	GA-1A42
	2"-8"	RF/Flat	GA-1A43
	10"-18"	RF/Wedge	GA-1A44
	10"-18"	RF/Flat	GA-1A45




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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
	1/2"-1 1/2"	RF	GL-1A41
	2"-6"	RF	GL-1A42
	8"-16"	RF	GL-1A43
	1/2"-1 1/2"	RF/Lift	CK-1A41
	2"-18"	RF/Wafer	CK-1A42
1C0	1/2"-1 1/2"	RF/FB	BA-1C01
	2"-4"	RF/FB	BA-1C02
	6"	RF/FB	BA-1C03
	2"-4"	RF/RB	BA-1C04
	6"	RF/RB	BA-1C05
	1/2"-1 1/2"	RF/Wedge	GA-1C01
	2"-6"	RF/Wedge	GA-1C02
	1/2"-1 1/2"	RF	GL-1C01
	2"-6"	RF	GL-1C02
	1/2"-1 1/2"	RF/Lift	CK-1C01
	2"-6"	RF/Wafer	CK-1C02
1D3	1/2"-1 1/2"	RF/FB	BA-1D31S
	2"-4"	RF/FB	BA-1D32S
	6"-18"	RF/FB	BA-1D33S
	2"-4"	RF/RB	BA-1D34S
	6"-18"	RF/RB	BA-1D35S
	1/2"-1 1/2"	RF/Wedge	GA-1D31S
	2"-8"	RF/Wedge	GA-1D32S
	2"-8"	RF/Flat	GA-1D33S
	10"-18"	RF/Wedge	GA-1D34S
	10"-18"	RF/Flat	GA-1D35S
	1/2"-1 1/2"	RF	GL-1D31S
	2"-6"	RF	GL-1D32S
	8"-16"	RF	GL-1D33S
	1/2"-1 1/2"	RF/Lift	CK-1D31S

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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
	2"-18"	RF/Wafer	CK-1D32S
1D6	1/2"-1 1/2"	RF/FB	BA-1D61S
	2"-4"	RF/FB	BA-1D62S
	6"-18"	RF/FB	BA-1D63S
	2"-4"	RF/RB	BA-1D64S
	6"-18"	RF/RB	BA-1D65S
	1/2"-1 1/2"	RF/Wedge	GA-1D61S
	2"-8"	RF/Wedge	GA-1D62S
	2"-8"	RF/Flat	GA-1D63S
	10"-18"	RF/Wedge	GA-1D64S
	10"-18"	RF/Flat	GA-1D65S
	1/2"-1 1/2"	RF	GL-1D61S
	2"-6"	RF	GL-1D62S
	8"-16"	RF	GL-1D63S
	1/2"-1 1/2"	RF/Lift	CK-1D61S
	2"-18"	RF/Wafer	CK-1D62S
1G0	1/2"-1 1/2"	RF/FB	BA-1G01
	2"-4"	RF/FB	BA-1G02
	2"-4"	RF/RB	BA-1G03
	1/2"-1 1/2"	RF/Wedge	GA-1G01
	2"-4"	RF/Wedge	GA-1G02
	1/2"-1 1/2"	RF	GL-1G01
	2"-4"	RF	GL-1G02
	1/2"-1 1/2"	RF/Lift	CK-1G01
	2"-4"	RF/Wafer	CK-1G02
1G3	1/2"-1 1/2"	RF/FB	BA-1G31
	2"-4"	RF/FB	BA-1G32
	6"-12"	RF/FB	BA-1G33
	2"-4"	RF/RB	BA-1G34
	6"-12"	RF/RB	BA-1G35

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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
	1/2"-1 1/2"	RF/Wedge	GA-1G31
	2"-8"	RF/Wedge	GA-1G32
	10"-12"	RF/Wedge	GA-1G33
	1/2"-1 1/2"	RF	GL-1G31
	2"-6"	RF	GL-1G32
	8"-12"	RF	GL-1G33
	1/2"-1 1/2"	RF/Lift	CK-1G31
	2"-12"	RF/Wafer	CK-1G32
1L0	1/2"-1 1/2"	RF/FB	BA-1L01
	2"-4"	RF/FB	BA-1L02
	6"-18"	RF/FB	BA-1L03
	2"-4"	RF/RB	BA-1L04
	6"-18"	RF/RB	BA-1L05
	1/2"-1 1/2"	RF/Wedge	GA-1L01
	2"-8"	RF/Wedge	GA-1L02
	2"-8"	RF/Flat	GA-1L03
	10"-18"	RF/Wedge	GA-1L04
	10"-18"	RF/Flat	GA-1L05
	1/2"-1 1/2"	RF	GL-1L01
	2"-6"	RF	GL-1L02
	8"-16"	RF	GL-1L03
	1/2"-1 1/2"	RF/Lift	CK-1L01
	2"-18"	RF/Wafer	CK-1L02
1N0	1/2"-1 1/2"	RF/FB	BA-1N01
	2"-4"	RF/FB	BA-1N02
	6"-24"	RF/FB	BA-1N03
	2"-4"	RF/RB	BA-1N04
	6"-24"	RF/RB	BA-1N05
	1/2"-1 1/2"	RF/Wedge	GA-1N01
	2"-8"	RF/Wedge	GA-1N02

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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
	2"-8"	RF/Flat	GA-1N03
	10"-24"	RF/Wedge	GA-1N04
	10"-24"	RF/Flat	GA-1N05
	1/2"-1 1/2"	RF	GL-1N01
	2"-6"	RF	GL-1N02
	8"-16"	RF	GL-1N03
	1/2"-1 1/2"	RF/Lift	CK-1N01
	2"-24"	RF/Wafer	CK-1N02
	6"	RF	BT-1N01
	8"-24"	RF	BT-1N02
1P0	1/2"-1 1/2"	FF/FB	BA-1P01
	2"-4"	FF/FB	BA-1P02
	6"-18"	FF/FB	BA-1P03
	2"-4"	FF/RB	BA-1P04
	6"-18"	FF/RB	BA-1P05
	1/2"-1 1/2"	FF/Wedge	GA-1P01
	2"-8"	FF/Wedge	GA-1P02
	2"-8"	FF/Flat	GA-1P03
	10"-18"	FF/Wedge	GA-1P04
	10"-18"	FF/Flat	GA-1P05
	1/2"-1 1/2"	FF	GL-1P01
	2"-6"	FF	GL-1P02
	8"-16"	FF	GL-1P03
	1/2"-1 1/2"	FF/Lift	CK-1P01
	2"-18"	FF/Wafer	CK-1P02
1V0	1/2"-1 1/2"	FF/FB	BA-1V01
	2"-4"	FF/FB	BA-1V02
	2"-4"	FF/RB	BA-1V03
	1/2"-1 1/2"	FF/Wedge	GA-1V01
	2"-4"	FF/Wedge	GA-1V02

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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
	1/2"-1 1/2"	FF	GL-1V01
	2"-4"	FF	GL-1V02
	1/2"-1 1/2"	FF/Lift	CK-1V01
	2"-4"	FF/Wafer	CK-1V02
3C0	1/2"-1 1/2"	RF/FB	BA-3C01
	2"-4"	RF/FB	BA-3C02
	6"	RF/FB	BA-3C03
	2"-4"	RF/RB	BA-3C04
	6"	RF/RB	BA-3C05
	1/2"-1 1/2"	RF/Wedge	GA-3C01
	2"-6"	RF/Wedge	GA-3C02
	1/2"-1 1/2"	RF	GL-3C01
	2"-6"	RF	GL-3C02
	1/2"-1 1/2"	RF/Lift	CK-3C01
	2"-6"	RF/Wafer	CK-3C02
3D3	1/2"-1 1/2"	RF/FB	BA-3D31S
	2"-4"	RF/FB	BA-3D32S
	6"-18"	RF/FB	BA-3D33S
	2"-4"	RF/RB	BA-3D34S
	6"-18"	RF/RB	BA-3D35S
	1/2"-1 1/2"	RF/Wedge	GA-3D31S
	2"-8"	RF/Wedge	GA-3D32S
	2"-8"	RF/Flat	GA-3D33S
	10"-18"	RF/Wedge	GA-3D34S
	10"-18"	RF/Flat	GA-3D35S
	1/2"-1 1/2"	RF	GL-3D31S
	2"-6"	RF	GL-3D32S
	8"-16"	RF	GL-3D33S
	1/2"-1 1/2"	RF/Lift	CK-3D31S
	2"-18"	RF/Wafer	CK-3D32S

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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
3D6	1/2"-1 1/2"	RF/FB	BA-3D61S
	2"-4"	RF/FB	BA-3D62S
	6"-20"	RF/FB	BA-3D63S
	2"-4"	RF/RB	BA-3D64S
	6"-20"	RF/RB	BA-3D65S
	1/2"-1 1/2"	RF/Wedge	GA-3D61S
	2"-8"	RF/Wedge	GA-3D62S
	2"-8"	RF/Flat	GA-3D63S
	10"-20"	RF/Wedge	GA-3D64S
	10"-20"	RF/Flat	GA-3D65S
	1/2"-1 1/2"	RF	GL-3D61S
	2"-6"	RF	GL-3D62S
	8"-16"	RF	GL-3D63S
	1/2"-1 1/2"	RF/Lift	CK-3D61S
	2"-20"	RF/Wafer	CK-3D62S
	1/2"-1 1/2"	RF/FB	BA-3L01
	2"-4"	RF/FB	BA-3L02
	6"-18"	RF/FB	BA-3L03
	2"-4"	RF/RB	BA-3L04
	6"-18"	RF/RB	BA-3L05
3L0	1/2"-1 1/2"	RF/Wedge	GA-3L01
	2"-8"	RF/Wedge	GA-3L02
	2"-8"	RF/Flat	GA-3L03
	10"-18"	RF/Wedge	GA-3L04
	10"-18"	RF/Flat	GA-3L05
	1/2"-1 1/2"	RF	GL-3L01
	2"-6"	RF	GL-3L02
	8"-16"	RF	GL-3L03
	1/2"-1 1/2"	RF/Lift	CK-3L01
	2"-18"	RF/Wafer	CK-3L02

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PIPING CLASS	VALVE SIZE RANGE	END CONNECTION/ CONSTRUCTION	TAG NO.
3N0	1/2"-1 1/2"	RF/FB	BA-3N01
	2"-4"	RF/FB	BA-3N02
	6"-20"	RF/FB	BA-3N03
	2"-4"	RF/RB	BA-3N04
	6"-20"	RF/RB	BA-3N05
	1/2"-1 1/2"	RF/Wedge	GA-3N01
	2"-8"	RF/Wedge	GA-3N02
	2"-8"	RF/Flat	GA-3N03
	10"-20"	RF/Wedge	GA-3N04
	10"-20"	RF/Flat	GA-3N05
	1/2"-1 1/2"	RF	GL-3N01
	2"-6"	RF	GL-3N02
	8"-16"	RF	GL-3N03
	1/2"-1 1/2"	RF/Lift	CK-3N01
	2"-20"	RF/Wafer	CK-3N02
	1/2"-1 1/2"	FF/FB	BA-3P01
	2"-4"	FF/FB	BA-3P02
	6"-18"	FF/FB	BA-3P03
	2"-4"	FF/RB	BA-3P04
	6"-18"	FF/RB	BA-3P05
3P0	1/2"-1 1/2"	FF/Wedge	GA-3P01
	2"-8"	FF/Wedge	GA-3P02
	2"-8"	FF/Flat	GA-3P03
	10"-18"	FF/Wedge	GA-3P04
	10"-18"	FF/Flat	GA-3P05
	1/2"-1 1/2"	FF	GL-3P01
	2"-6"	FF	GL-3P02
	8"-16"	FF	GL-3P03
	1/2"-1 1/2"	FF/Lift	CK-3P01
	2"-18"	FF/Wafer	CK-3P02

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## **APPENDIX C**

### **VALVE CLASSES SPECIFICATION**




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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	800lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	ISO 17292 / ASME B16.34			
Body Material	Carbon Steel ASTM A105			
Trim Material	Ball: A105+75µENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75µENP +RPTFE			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	800 Lb SW To Connect Pipe			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, One Piece, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6.Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-1A11		
Piping Class	1A1	Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Ball: A105+75µENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75µENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Ball		Tag Number BA-1A12			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75µENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75µENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1A13			
Piping Class	1A1	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75μENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75μENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Full Bore, Split Body, Trunnion Mounted				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 10. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"-18"	
Valve Type Ball		Tag Number BA-1A14			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75μENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75μENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1A15			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75μENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75μENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 10. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"-18"	
Valve Type	Ball	Tag Number BA-1A16			
Piping Class	1A1	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	800lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	800 Lb SW To Connect Pipe				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-1A11			
Piping Class	1A1	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-1A12			
Piping Class	1A1	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1A13			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1A14			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate		Tag Number GA-1A15			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate		Tag Number GA-1A16			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 602 / ASME B16.34			
Body Material	Carbon Steel ASTM A105			
Trim Material	Seat And Plug And Stem:410			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				1/2"-1 ½"
Valve Type Globe		Tag Number GL-1A11		
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seat And Plug And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type	Globe	Tag Number GL-1A12			
Piping Class	1A1	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seat And Plug And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type Globe		Tag Number GL-1A13			
Piping Class 1A1		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seat And Disc:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number CK-1A11	
Piping Class		1A1		Specification Number CMIT-240048-728-PIP-15.03-3001	






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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 609 CATEGORY-B										
Body Material	Carbon Steel ASTM A216 WCB										
Trim Material	Trim: AISI 410,Stem: ASTM A182 F6a,Seat and Seal: Cr13 with Surface quenching										
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153										
End Connection	150 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	Lever										
Body Construction	Three-Eccentricity Lug Type, Metal-Seat										
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To API 609 CATEGORY-B Lug type. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>6"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			6"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		6"									
Valve Type	Butterfly	Tag Number BT-1A11									
Piping Class	1A1	Specification Number CMIT-240048-728-PIP-15.03-3001									

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 609 CATEGORY-B				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Trim: AISI 410,Stem: ASTM A182 F6a,Seat and Seal: Cr13 with Surface quenching				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Three-Eccentricity Lug Type, Metal-Seat				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1.Face To Face Dimensions To API 609 CATEGORY-B Lug type. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 1mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-18"	
Valve Type Butterfly			Tag Number BT-1A12		
Piping Class 1A1			Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	ISO 17292 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A182 F51			
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			1/2"-1 ½"	
Valve Type	Ball		Tag Number	
			BA-1A41	
Piping Class	1A4		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1A42			
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)			
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			6"-18"	
Valve Type	Ball		Tag Number	
			BA-1A43	
Piping Class	1A4		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1A44			
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"-18"	
Valve Type	Ball	Tag Number BA-1A45			
Piping Class	1A4	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Gate		Tag Number GA-1A41			
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type	Gate	Tag Number GA-1A42			
Piping Class	1A4	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1A43			
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate		Tag Number GA-1A44			
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate			Tag Number GA-1A45		
Piping Class 1A4			Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Globe		Tag Number GL-1A41			
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe		Tag Number GL-1A42			
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 623 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A			
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				8"-16"
Valve Type Globe		Tag Number GL-1A43		
Piping Class 1A4		Specification Number CMIT-240048-728-PIP-15.03-3001		




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 2. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Check, Lift Piston		Tag Number		
			CK-1A41		
Piping Class	1A4		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-18"	
Valve Type	Wafer Check Valve		Tag Number CK-1A42		
Piping Class	1A4		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316L				
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7.Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Ball		Tag Number BA-1C01			
Piping Class 1C0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1C02			
Piping Class	1C0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Full Bore, Split Body, Trunnion Mounted				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"	
Valve Type Ball		Tag Number BA-1C03			
C03 1C0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1C04			
Piping Class 1C0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"	
Valve Type Ball		Tag Number BA-1C05			
C03 1C0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316L				
Trim Material	Seats And Gate: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Gate		Tag Number GA-1C01			
Piping Class 1C0		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Seats And Gate: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Gate		Tag Number GA-1C02			
Piping Class 1C0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316L				
Trim Material	Seat And Plug: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Globe			Tag Number		
			GL-1C01		
Piping Class 1C0			Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Seat And Plug: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe			Tag Number		
			GL-1C02		
Piping Class 1C0			Specification Number		
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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 602 / ASME B16.34			
Body Material	Stainless Steel ASTM A182 F316L			
Trim Material	Seat And Disc: ASTM A182 F316L+Stellite			
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	--			
Body Construction	Lift Piston Bolted Cover			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				1/2"-1 ½"
Valve Type		Check, Lift Piston		Tag Number
				CK-1C01
Piping Class		1C0		Specification Number
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Seat And Disc: ASTM A182 F316L+Stellite				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type		Wafer Check Valve		Tag Number	
				CK-1C02	
Piping Class		1C0		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Ball		Tag Number BA-1D31S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1D32S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Full Bore, Split Body, Trunnion Mounted.				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range 6"-18"	
Valve Type Ball		Tag Number BA-1D33S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1D34S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted.				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range 6"-18"	
Valve Type Ball		Tag Number BA-1D35S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Gate		Tag Number GA-1D31S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type	Gate	Tag Number GA-1D32S			
Piping Class	1D3	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type	Gate	Tag Number GA-1D33S			
Piping Class	1D3	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type	Gate	Tag Number GA-1D35S			
Piping Class	1D3	Specification Number CMIT-240048-728-PIP-15.03-3001			









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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe		Tag Number GL-1D32S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type Globe		Tag Number GL-1D33S			
Piping Class 1D3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Check, Lift Piston		Tag Number		
			CK-1D31S		
Piping Class	1D3		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-18"	
Valve Type		Wafer Check Valve		Tag Number	
				CK-1D32S	
Piping Class		1D3		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-1D61S			
Piping Class	1D6	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-4"
Valve Type	Ball	Tag Number BA-1D62S		
Piping Class	1D6	Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Full Bore, Split Body, Trunnion Mounted.				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range 6"-18"	
Valve Type Ball		Tag Number BA-1D63S			
Piping Class 1D6		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1D64S			
Piping Class 1D6		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Reduced Bore, Split Body, Trunnion Mounted.			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range 6"-18"	
Valve Type	Ball		Tag Number BA-1D65S	
Piping Class	1D6		Specification Number CMIT-240048-728-PIP-15.03-3001	

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-1D61S			
Piping Class	1D6	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1D62S			
Piping Class 1D6		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1D63S			
Piping Class 1D6		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate		Tag Number GA-1D65S			
Piping Class 1D6		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Globe	Tag Number GL-1D61S			
Piping Class	1D6	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe		Tag Number GL-1D62S			
Piping Class 1D6		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type Globe		Tag Number GL-1D63S			
Piping Class 1D6		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Check, Lift Piston		Tag Number		
			CK-1D61S		
Piping Class	1D6		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-18"	
Valve Type	Wafer Check Valve		Tag Number		
			CK-1D62S		
Piping Class	1D6		Specification Number		
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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	ISO 17292 / ASME B16.34			
Body Material	Stainless Steel ASTM A182 F316			
Trim Material	Ball: ASTM A182 F316, Stem: ASTM A182 F316, Seat And Seal: RPTFE			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	-20 ~ 80°C			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Valve Design Life is 25 Years. 8. Material Certification: EN 10204 Type3.1.		Packing Material: RPTFE		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-1G01		
Piping Class	1G0	Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF8M				
Trim Material	Ball: ASTM A182 F316, Stem: ASTM A182 F316, Seat And Seal: ASTM A182 F316+ RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Valve Design Life is 25 Years. 9. Material Certification: EN 10204 Type3.1.			Packing Material: RPTFE		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
<b>Valve Check List</b>					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1G02			
Piping Class	1G0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF8M				
Trim Material	Ball: ASTM A182 F316, Stem: ASTM A182 F316, Seat And Seal: ASTM A182 F316+ RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Valve Design Life is 25 Years. 9. Material Certification: EN 10204 Type3.1.			Packing Material: RPTFE		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1G03			
Piping Class	1G0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316				
Trim Material	Seats And Gate: ASTM A182 F316+Stellite, Stem: ASTM A182 F316				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Valve Design Life is 25 Years. 7. Material Certification: EN 10204 Type3.1.			Packing Material: RPTFE		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Gate		Tag Number GA-1G01			
Piping Class 1G0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF8M				
Trim Material	Seats And Gate: ASTM A182 F316+Stellite, Stem: ASTM A182 F316				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Valve Design Life is 25 Years. 7. Material Certification: EN 10204 Type3.1.			Packing Material: RPTFE		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Gate	Tag Number GA-1G02			
Piping Class	1G0	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316				
Trim Material	Seat And Plug: ASTM A182 F316+Stellite, Stem: ASTM A182 F316				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Valve Design Life is 25 Years. 6. Material Certification: EN 10204 Type3.1.			Packing Material: RPTFE		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Globe	Tag Number GL-1G01			
Piping Class	1G0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF8M				
Trim Material	Seat And Plug: ASTM A182 F316+Stellite, Stem: ASTM A182 F316				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Valve Design Life is 25 Years. 6. Material Certification: EN 10204 Type3.1.			Packing Material: RPTFE		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Globe		Tag Number GL-1G02			
Piping Class 1G0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316				
Trim Material	Seat And Disc: ASTM A182 F316+Stellite				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Valve Design Life is 25 Years. 7. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number	
				CK-1G01	
Piping Class		1G0		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF8M				
Trim Material	Seat And Disc: ASTM A182 F316+Stellite				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Valve Design Life is 25 Years. 7. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Wafer Check Valve		Tag Number		
			CK-1G02		
Piping Class	1G0		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Ball: A105+75µENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75µENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Ball		Tag Number BA-1G31			
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75µENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75µENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1G32			
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75μENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75μENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Full Bore, Split Body, Trunnion Mounted				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"-12"	
Valve Type Ball		Tag Number BA-1G33			
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75μENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75μENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1G34			
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75μENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75μENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"-12"	
Valve Type	Ball	Tag Number BA-1G35			
Piping Class	1G3	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 602 / ASME B16.34			
Body Material	Carbon Steel ASTM A105			
Trim Material	Seats And Gate And Stem:410			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				1/2"-1 ½"
Valve Type Gate		Tag Number GA-1G31		
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 600 / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB			
Trim Material	Seats And Gate And Stem:410			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-8"
Valve Type Gate		Tag Number GA-1G32		
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-12"	
Valve Type Gate		Tag Number GA-1G33			
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seat And Plug And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Globe	Tag Number GL-1G31			
Piping Class	1G3	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seat And Plug And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type	Globe	Tag Number GL-1G32			
Piping Class	1G3	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 623 / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB			
Trim Material	Seat And Plug And Stem:410			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				8"-12"
Valve Type Globe		Tag Number GL-1G33		
Piping Class 1G3		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seat And Disc:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 3. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number	
				CK-1G31	
Piping Class		1G3		Specification Number	
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Valve Specification										
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10										
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)								
		Body	By Vendor	Seat By Vendor						
Design Code	API 594 / ASME B16.34									
Body Material	Carbon Steel ASTM A216 WCB									
Trim Material	Seat And Disc:410									
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153									
End Connection	150 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.									
Temperature Limitations	See APPENDIX A									
Valve Operation	--									
Body Construction	Wafer Type, Dual Plate, Long Pattern									
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)									
Service	See APPENDIX A									
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material								
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
		Additional Requirements: See Specification								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>2"-12"</td></tr></table>					Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			2"-12"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range								
		2"-12"								
Valve Type	Wafer Check Valve	Tag Number CK-1G32								
Piping Class	1G3	Specification Number CMIT-240048-728-PIP-15.03-3001								

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	ISO 17292 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A182 F55			
Trim Material	Ball: ASTM A182-F55+Stellite, Stem: A182-F55, Seat and Seal: A182-F55+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating Metal Seats			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
1/2"-1 ½"				
Valve Type Ball		Tag Number BA-1L01		
Piping Class 1L0		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Ball: ASTM A182-F55+Stellite, Stem: A182-F55, Seat and Seal: A182-F55+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)				
	Anti-Static, Anti Blowout Stem				
	Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number			
		BA-1L02			
Piping Class	1L0	Specification Number			
		CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)			
Trim Material	Ball: ASTM A182-F55+Stellite, Stem: A182-F55, Seat and Seal: A182-F55+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted Metal Seats			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)			
	Anti-Static, Anti Blowout Stem			
	Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			6"-18"	
Valve Type	Ball		Tag Number	
			BA-1L03	
Piping Class	1L0		Specification Number	
			CMIT-240048-728-PIP-15.03-3001	

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Ball: ASTM A182-F55+Stellite,Stem: A182-F55,Seat and Seal: A182-F55+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
<b>Valve Check List</b>					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1L04			
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Ball: ASTM A182-F55+Stellite,Stem: A182-F55,Seat and Seal: A182-F55+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10.Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"-18"	
Valve Type Ball		Tag Number BA-1L05			
Piping Class 1L0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F55				
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-1L01			
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001			









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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 6D / ASME B16.34										
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A										
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated										
End Connection	150 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	Handwheel with Lock Device										
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke										
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>2"-8"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			2"-8"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		2"-8"									
Valve Type	Gate	Tag Number GA-1L03									
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001									

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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 600 / ASME B16.34										
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)										
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated										
End Connection	150 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	Gear Operator										
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke										
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>10"-18"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			10"-18"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		10"-18"									
Valve Type	Gate	Tag Number GA-1L04									
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001									

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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 6D / ASME B16.34										
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)										
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated										
End Connection	150 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	Gear Operator										
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke										
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>10"-18"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			10"-18"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		10"-18"									
Valve Type	Gate	Tag Number GA-1L05									
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001									

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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 602 / ASME B16.34										
Body Material	Duplex Stainless Steel ASTM A182 F55										
Trim Material	Seat And Plug: ASTM A182 F55+Stellite, Stem: ASTM A182 F55										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated										
End Connection	150 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	Handwheel with Lock Device										
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke										
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>1/2"-1 ½"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			1/2"-1 ½"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		1/2"-1 ½"									
Valve Type	Globe	Tag Number GL-1L01									
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001									

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seat And Plug: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type	Globe	Tag Number GL-1L02			
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seat And Plug: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type	Globe	Tag Number GL-1L03			
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 602 / ASME B16.34										
Body Material	Duplex Stainless Steel ASTM A182 F55										
Trim Material	Seat And Disc: ASTM A182 F55+Stellite										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated										
End Connection	150 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	--										
Body Construction	Lift Piston										
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>1/2"-1 1/2"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			1/2"-1 1/2"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		1/2"-1 1/2"									
Valve Type	Check, Lift Piston	Tag Number CK-1L01									
Piping Class	1L0	Specification Number CMIT-240048-728-PIP-15.03-3001									


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seat And Disc: ASTM A182 F55+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-18"	
Valve Type	Wafer Check Valve		Tag Number		
			CK-1L02		
Piping Class	1L0		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Ball	Tag Number			
		BA-1N01			
Piping Class	1N0	Specification Number			
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1N02			
Piping Class	1N0	Specification Number CMIT-240048-728-PIP-15.03-3001			



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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)				
	Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1N04			
Piping Class	1N0	Specification Number CMIT-240048-728-PIP-15.03-3001			



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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 602 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A182 F51			
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				1/2"-1 ½"
Valve Type Gate		Tag Number GA-1N01		
Piping Class 1N0		Specification Number CMIT-240048-728-PIP-15.03-3001		




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1N03			
Piping Class 1N0		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-24"	
Valve Type	Gate	Tag Number GA-1N04			
Piping Class	1N0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-24"	
Valve Type Gate			Tag Number GA-1N05		
Piping Class 1N0			Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Globe			Tag Number		
			GL-1N01		
Piping Class 1N0			Specification Number		
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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 623 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A			
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-6"
Valve Type Globe		Tag Number GL-1N02		
Piping Class 1N0		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type	Globe	Tag Number GL-1N03			
Piping Class	1N0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 2. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number	
				CK-1N01	
Piping Class		1N0		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-24"	
Valve Type	Wafer Check Valve		Tag Number CK-1N02		
Piping Class	1N0		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 609 CATEGORY-B			
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A			
Trim Material	Trim: ASTM A182 F51, Stem: ASTM A182 F51,Seat and Seal: A182 F51+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Three-Eccentricity Lug Type, Metal-Seat			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To API 609 CATEGORY-B Lug type. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
		6"		
Valve Type	Butterfly	Tag Number BT-1N01		
Piping Class	1N0	Specification Number CMIT-240048-728-PIP-15.03-3001		




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 609 CATEGORY-B				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Trim: ASTM A182 F51, Stem: ASTM A182 F51,Seat and Seal: A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Three-Eccentricity Lug Type, Metal-Seat				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1.Face To Face Dimensions To API 609 CATEGORY-B Lug type. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-24"	
Valve Type Butterfly		Tag Number BT-1N02			
Piping Class 1N0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)				
	Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-1P01			
Piping Class	1P0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1P02			
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)			
Trim Material	Ball: ASTM A182-F51+Stellite, Stem: A182-F51, Seat and Seal: A182-F51+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated			
End Connection	150 Lb FF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted Metal Seats			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
6"-18"				
Valve Type Ball		Tag Number BA-1P03		
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)				
	Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1P04			
Piping Class	1P0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				6"-18"	
Valve Type Ball		Tag Number BA-1P05			
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 602 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A182 F51			
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	150 Lb FF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				1/2"-1 ½"
Valve Type Gate		Tag Number GA-1P01		
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1P02			
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-1P03			
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate		Tag Number GA-1P04			
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate			Tag Number		
			GA-1P05		
Piping Class 1P0			Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 1/2"	
Valve Type Globe			Tag Number		
			GL-1P01		
Piping Class 1P0			Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe		Tag Number GL-1P02			
Piping Class 1P0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type	Globe	Tag Number GL-1P03			
Piping Class	1P0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	150 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 4. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number	
				CK-1P01	
Piping Class		1P0		Specification Number	
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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 594 / ASME B16.34										
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A										
Trim Material	Seat And Disc: ASTM A182 F51+Stellite										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated										
End Connection	150 Lb To Be Connected With FF Flanges According To ASME B16.5. Wafer Type Connection.										
Temperature Limitations	See APPENDIX A										
Valve Operation	--										
Body Construction	Wafer Type, Dual Plate, Long Pattern										
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>2"-18"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			2"-18"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		2"-18"									
Valve Type	Wafer Check Valve		Tag Number CK-1P02								
Piping Class	1P0		Specification Number CMIT-240048-728-PIP-15.03-3001								




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Ball: A105+75µENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75µENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Ball		Tag Number BA-1V01			
Piping Class 1V0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75µENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75µENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-1V02			
Piping Class	1V0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Ball: A105+75μENP,Stem: ASTM A182 F6a,Seat And Seal: A105+75μENP +RPTFE				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-1V03			
Piping Class 1V0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-1V01			
Piping Class	1V0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB				
Trim Material	Seats And Gate And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Gate		Tag Number GA-1V02			
Piping Class 1V0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seat And Plug And Stem:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Globe		Tag Number GL-1V01			
Piping Class 1V0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 623 / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB			
Trim Material	Seat And Plug And Stem:410			
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	150 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-4"
Valve Type Globe		Tag Number GL-1V02		
Piping Class 1V0		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	150lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105				
Trim Material	Seat And Disc:410				
Bolting	Bolt To ASTM A193 B7, Nut To ASTM A194 2H; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	150 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 5. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number	
				CK-1V01	
Piping Class		1V0		Specification Number	
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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	ISO 17292 / ASME B16.34			
Body Material	Stainless Steel ASTM A182 F316L			
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE			
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7.Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			1/2"-1 ½"	
Valve Type	Ball		Tag Number	
			BA-3C01	
Piping Class	3C0		Specification Number	
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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Stainless Steel ASTM A351 CF3M			
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE			
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-4"
Valve Type	Ball	Tag Number BA-3C02		
Piping Class	3C0	Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Stainless Steel ASTM A351 CF3M			
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE			
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				6"
Valve Type Ball		Tag Number BA-3C03		
C03 3C0		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Stainless Steel ASTM A351 CF3M			
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE			
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Reduced Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-4"
Valve Type	Ball	Tag Number BA-3C04		
Piping Class	3C0	Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Stainless Steel ASTM A351 CF3M			
Trim Material	Ball: ASTM A182 F316L+Stellite,Stem: ASTM A182 F316L,Seat and Seal: ASTM A182 F316L+RPTFE			
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Reduced Bore, Split Body, Trunnion Mounted			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				6"
Valve Type Ball		Tag Number BA-3C05		
C03 3C0		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316L				
Trim Material	Seats And Gate: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Gate		Tag Number GA-3C01			
Piping Class 3C0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Seats And Gate: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Gate		Tag Number GA-3C02			
Piping Class 3C0		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Stainless Steel ASTM A182 F316L				
Trim Material	Seat And Plug: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Globe			Tag Number		
			GL-3C01		
Piping Class 3C0			Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Seat And Plug: ASTM A182 F316L+Stellite, Stem: ASTM A182 F316L				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5.Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe			Tag Number		
			GL-3C02		
Piping Class 3C0			Specification Number		
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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 602 / ASME B16.34			
Body Material	Stainless Steel ASTM A182 F316L			
Trim Material	Seat And Disc: ASTM A182 F316L+Stellite			
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	--			
Body Construction	Lift Piston Bolted Cover			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6.Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			1/2"-1 ½"	
Valve Type	Check, Lift Piston		Tag Number	
			CK-3C01	
Piping Class	3C0		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Stainless Steel ASTM A351 CF3M				
Trim Material	Seat And Disc: ASTM A182 F316L+Stellite				
Bolting	Bolt To ASTM A320 B8M Class 2, Nut To ASTM A194 8M				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
<b>Valve Check List</b>					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Wafer Check Valve		Tag Number CK-3C02			
Piping Class 3C0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	ISO 17292 / ASME B16.34			
Body Material	Carbon Steel ASTM A105N(HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			1/2"-1 ½"	
Valve Type	Ball		Tag Number BA-3D31S	
Piping Class	3D3		Specification Number CMIT-240048-728-PIP-15.03-3001	

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			2"-4"	
Valve Type	Ball	Tag Number BA-3D32S		
Piping Class	3D3	Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted.			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range 6"-18"
Valve Type Ball		Tag Number BA-3D33S		
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Reduced Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
2"-4"				
Valve Type Ball		Tag Number BA-3D34S		
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001		




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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Reduced Bore, Split Body, Trunnion Mounted.			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range 6"-18"	
Valve Type	Ball		Tag Number BA-3D35S	
Piping Class	3D3		Specification Number CMIT-240048-728-PIP-15.03-3001	

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Gate		Tag Number GA-3D31S			
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-3D32S			
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001			






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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate		Tag Number GA-3D35S			
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 602 / ASME B16.34			
Body Material	Carbon Steel ASTM A105N(HIC&SSC)			
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
1/2"-1 ½"				
Valve Type Globe		Tag Number GL-3D31S		
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001		




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe		Tag Number GL-3D32S			
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type Globe		Tag Number GL-3D33S			
Piping Class 3D3		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Check, Lift Piston		Tag Number		
			CK-3D31S		
Piping Class	3D3		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 3mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-18"	
Valve Type	Wafer Check Valve		Tag Number		
			CK-3D32S		
Piping Class	3D3		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-3D61S			
Piping Class	3D6	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Full Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-4"
Valve Type	Ball	Tag Number BA-3D62S		
Piping Class	3D6	Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Full Bore, Split Body, Trunnion Mounted.				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range 6"-20"	
Valve Type Ball		Tag Number BA-3D63S			
Piping Class 3D6		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)			
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Lever			
Body Construction	Reduced Bore, Split Body, Floating			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
2"-4"				
Valve Type Ball		Tag Number BA-3D64S		
Piping Class 3D6		Specification Number CMIT-240048-728-PIP-15.03-3001		




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB (HIC&SSC)				
Trim Material	Ball: ASTM A182-F347+Stellite,Stem:S20910,Seat and Seal: F347+RPTFE				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Reduced Bore, Split Body, Trunnion Mounted.				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 11.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range 6"-20"	
Valve Type Ball		Tag Number BA-3D65S			
Piping Class 3D6		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite, Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 1/2"	
Valve Type	Gate	Tag Number GA-3D61S			
Piping Class	3D6	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 600 / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)			
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-8"
Valve Type	Gate	Tag Number GA-3D62S		
Piping Class	3D6	Specification Number CMIT-240048-728-PIP-15.03-3001		




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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 600 / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)			
Trim Material	Seats And Gate: ASTM A182-F347+Stellite, Stem: S20910			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			10"-20"	
Valve Type	Gate	Tag Number GA-3D64S		
Piping Class	3D6	Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seats And Gate: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-20"	
Valve Type	Gate	Tag Number GA-3D65S			
Piping Class	3D6	Specification Number CMIT-240048-728-PIP-15.03-3001			



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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type Globe		Tag Number GL-3D62S			
Piping Class 3D6		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Plug: ASTM A182-F347+Stellite,Stem: S20910				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type Globe		Tag Number GL-3D63S			
Piping Class 3D6		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Carbon Steel ASTM A105N(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Check, Lift Piston		Tag Number		
			CK-3D61S		
Piping Class	3D6		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB(HIC&SSC)				
Trim Material	Seat And Disc: ASTM A182-F347+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Hot Dipped Galvanized To ASTM F2329/ASTM A153				
End Connection	300 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Valve Design Life is 25 Years. 8. The Wall Thickness of Valves Should Take 6mm Corrosion Allowance Into Consideration. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-20"	
Valve Type		Wafer Check Valve		Tag Number	
				CK-3D62S	
Piping Class		3D6		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F55				
Trim Material	Ball: ASTM A182-F55+Stellite, Stem: A182-F55, Seat and Seal: A182-F55+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9. Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
<b>Valve Check List</b>					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-3L01			
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 6D / ASME B16.34										
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A										
Trim Material	Ball: ASTM A182-F55+Stellite,Stem: A182-F55,Seat and Seal: A182-F55+Stellite										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated										
End Connection	300 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	Lever										
Body Construction	Full Bore, Split Body, Floating Metal Seats										
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9.Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>2"-4"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			2"-4"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		2"-4"									
Valve Type	Ball	Tag Number BA-3L02									
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001									

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)			
Trim Material	Ball: ASTM A182-F55+Stellite,Stem: A182-F55,Seat and Seal: A182-F55+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted Metal Seats			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10.Material Certification: EN 10204 Type3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
6"-18"				
Valve Type Ball		Tag Number BA-3L03		
Piping Class 3L0		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Ball: ASTM A182-F55+Stellite,Stem: A182-F55,Seat and Seal: A182-F55+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 8. Valve Design Life is 25 Years. 9.Material Certification: EN 10204 Type3.1.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-3L04			
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)			
Trim Material	Ball: ASTM A182-F55+Stellite, Stem: A182-F55, Seat and Seal: A182-F55+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Reduced Bore, Split Body, Trunnion Mounted Metal Seats			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)			
	Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 9. Valve Design Life is 25 Years. 10. Material Certification: EN 10204 Type 3.1.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List				
Approved Manufacturer	Manufacturer Figure Number		Nominal Size Range	
			6"-18"	
Valve Type	Ball		Tag Number	
			BA-3L05	
Piping Class	3L0		Specification Number	
			CMIT-240048-728-PIP-15.03-3001	




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F55				
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-3L01			
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type	Gate	Tag Number GA-3L02			
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-3L03			
Piping Class 3L0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 600 / ASME B16.34										
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)										
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated										
End Connection	300 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	Gear Operator										
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke										
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>10"-18"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			10"-18"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		10"-18"									
Valve Type	Gate	Tag Number GA-3L04									
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001									

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S32760 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate		Tag Number GA-3L05			
Piping Class 3L0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F55				
Trim Material	Seat And Plug: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
<div>Valve Check List</div> <div>Approved ManufacturerManufacturer Figure NumberNominal Size Range</div> <div>1/2"-1 ½"</div>					
Valve TypeGlobe			Tag Number GL-3L01		
Piping Class3L0			Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seat And Plug: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-6"	
Valve Type	Globe	Tag Number GL-3L02			
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seat And Plug: ASTM A182 F55+Stellite, Stem: ASTM A182 F55				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
		All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type	Globe	Tag Number GL-3L03			
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 602 / ASME B16.34										
Body Material	Duplex Stainless Steel ASTM A182 F55										
Trim Material	Seat And Disc: ASTM A182 F55+Stellite										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated										
End Connection	300 Lb RF Flange To ASME B16.5										
Temperature Limitations	See APPENDIX A										
Valve Operation	--										
Body Construction	Lift Piston										
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 3. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>1/2"-1 1/2"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			1/2"-1 1/2"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		1/2"-1 1/2"									
Valve Type	Check, Lift Piston	Tag Number CK-3L01									
Piping Class	3L0	Specification Number CMIT-240048-728-PIP-15.03-3001									




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A995 Gr.6A				
Trim Material	Seat And Disc: ASTM A182 F55+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. This Type Of Valve Is Used In Sour Service. Vendor Shall Have Clear Information On The Valve Tag That The Valves They Supplied Are Sulphur Resisting. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
			All Material Used In Sour Service Shall Meet The Requirements Of NACE MR 0175/ISO15156		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-18"	
Valve Type	Wafer Check Valve		Tag Number		
			CK-3L02		
Piping Class	3L0		Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-3N01			
Piping Class	3N0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type Ball		Tag Number BA-3N02			
Piping Class 3N0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)			
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted Metal Seats			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
6"-20"				
Valve Type Ball		Tag Number BA-3N03		
Piping Class 3N0		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)				
	Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-3N04			
Piping Class	3N0	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-3N01			
Piping Class	3N0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type	Gate	Tag Number GA-3N02			
Piping Class	3N0	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-3N03			
Piping Class 3N0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-20"	
Valve Type	Gate	Tag Number GA-3N04			
Piping Class	3N0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-20"	
Valve Type Gate			Tag Number GA-3N05		
Piping Class 3N0			Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Globe			Tag Number		
			GL-3N01		
Piping Class 3N0			Specification Number		
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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 623 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A			
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-6"
Valve Type Globe		Tag Number GL-3N02		
Piping Class 3N0		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 623 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A			
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	300 Lb RF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				8"-16"
Valve Type	Globe	Tag Number		
		GL-3N03		
Piping Class	3N0	Specification Number		
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb RF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 4. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number	
				CK-3N01	
Piping Class		3N0		Specification Number	
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Valve Specification											
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10											
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)									
		Body	By Vendor	Seat	By Vendor						
Design Code	API 594 / ASME B16.34										
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A										
Trim Material	Seat And Disc: ASTM A182 F51+Stellite										
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated										
End Connection	300 Lb To Be Connected With RF Flanges According To ASME B16.5. Wafer Type Connection.										
Temperature Limitations	See APPENDIX A										
Valve Operation	--										
Body Construction	Wafer Type, Dual Plate, Long Pattern										
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)										
Service	See APPENDIX A										
<b>Notes:</b> 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material								
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001								
			Additional Requirements: See Specification								
<div>Valve Check List</div> <table><tr><td>Approved Manufacturer</td><td>Manufacturer Figure Number</td><td>Nominal Size Range</td></tr><tr><td></td><td></td><td>2"-20"</td></tr></table>						Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range			2"-20"
Approved Manufacturer	Manufacturer Figure Number	Nominal Size Range									
		2"-20"									
Valve Type	Wafer Check Valve		Tag Number CK-3N02								
Piping Class	3N0		Specification Number CMIT-240048-728-PIP-15.03-3001								




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	ISO 17292 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Ball	Tag Number BA-3P01			
Piping Class	3P0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Full Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)				
	Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-3P02			
Piping Class	3P0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 6D / ASME B16.34			
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)			
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated			
End Connection	300 Lb FF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Gear Operator			
Body Construction	Full Bore, Split Body, Trunnion Mounted Metal Seats			
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate) Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature			
Service	See APPENDIX A			
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Double Block And Bleed ones, With Any End Capable Of Bearing Full Differential Pressure. 3. Valves To Be Asbestos Free. 4. Seals To Be Resistant To Explosive Decompression. 5. Hydraulic Test According To API 598 / ASME B16.34. 6. Valves Shall Have Position Indicator Showing Open And Close Positions. 7. Inner Or Outer Leakage Is Not Acceptable. 8. Material Certification: EN 10204 Type3.1. 9. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
6"-18"				
Valve Type Ball		Tag Number BA-3P03		
Piping Class 3P0		Specification Number CMIT-240048-728-PIP-15.03-3001		


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Ball: ASTM A182-F51+Stellite,Stem: A182-F51,Seat and Seal: A182-F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Lever				
Body Construction	Reduced Bore, Split Body, Floating Metal Seats				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 607(Providing Certificate)				
	Anti-Static, Anti Blowout Stem Sealing To Meet Requirements For Medium At Rated Pressure And Temperature				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Asbestos Free. 3. Seals To Be Resistant To Explosive Decompression. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Valves Shall Have Position Indicator Showing Open And Close Positions. 6. Inner Or Outer Leakage Is Not Acceptable. 7. Material Certification: EN 10204 Type3.1. 8. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-4"	
Valve Type	Ball	Tag Number BA-3P04			
Piping Class	3P0	Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Solid Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type	Gate	Tag Number GA-3P01			
Piping Class	3P0	Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-3P02			
Piping Class 3P0		Specification Number CMIT-240048-728-PIP-15.03-3001			


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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-8"	
Valve Type Gate		Tag Number GA-3P03			
Piping Class 3P0		Specification Number CMIT-240048-728-PIP-15.03-3001			




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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 600 / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flexible Wedge Type Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type	Gate	Tag Number GA-3P04			
Piping Class	3P0	Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 6D / ASME B16.34				
Body Material	Carbon Steel ASTM A216 WCB+ S31803 WELDING OVERLAY CLAD (THK ≥ 3 mm)				
Trim Material	Seats And Gate: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; Xylan Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Flat Gate Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				10"-18"	
Valve Type Gate			Tag Number		
			GA-3P05		
Piping Class 3P0			Specification Number		
			CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Handwheel with Lock Device				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type Globe			Tag Number GL-3P01		
Piping Class 3P0			Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification				
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10				
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)		
		Body	By Vendor	Seat By Vendor
Design Code	API 623 / ASME B16.34			
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A			
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51			
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated			
End Connection	300 Lb FF Flange To ASME B16.5			
Temperature Limitations	See APPENDIX A			
Valve Operation	Handwheel with Lock Device			
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke			
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)			
Service	See APPENDIX A			
<b>Notes:</b> 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.		Packing Material: Emission Free Material		
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
		Additional Requirements: See Specification		
Valve Check List				
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range
				2"-6"
Valve Type Globe		Tag Number GL-3P02		
Piping Class 3P0		Specification Number CMIT-240048-728-PIP-15.03-3001		

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 623 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Plug: ASTM A182 F51+Stellite, Stem: ASTM A182 F51				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	Gear Operator				
Body Construction	Bolted Bonnet, Rising Stem Outside Screw And Yoke				
Trim Construction	Swivel Type Plug, Renewable Seat Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Inner Or Outer Leakage Is Not Acceptable. 5. Material Certification: EN 10204 Type3.1. 6. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				8"-16"	
Valve Type Globe		Tag Number GL-3P03			
Piping Class 3P0		Specification Number CMIT-240048-728-PIP-15.03-3001			

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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 602 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A182 F51				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb FF Flange To ASME B16.5				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Lift Piston				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 6. Face To Face Dimensions To ASME B16.10. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.		Packing Material: Emission Free Material			
		Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT- 240048-728-PIP-15.03-3001			
		Additional Requirements: See Specification			
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				1/2"-1 ½"	
Valve Type		Check, Lift Piston		Tag Number	
				CK-3P01	
Piping Class		3P0		Specification Number	
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Valve Specification					
Specified Valve Size Shall Be Equal To Nominal Pipe Size in ASME B36.10					
Pressure Temperature Rating	300lb ASME B16.34	Test Pressure Mpa (ASME B16.34)			
		Body	By Vendor	Seat	By Vendor
Design Code	API 594 / ASME B16.34				
Body Material	Duplex Stainless Steel ASTM A890 Gr.4A				
Trim Material	Seat And Disc: ASTM A182 F51+Stellite				
Bolting	Bolt To ASTM A193 B7M, Nut To ASTM A194 2HM; XYLAN Fluoropolymer Coated				
End Connection	300 Lb To Be Connected With FF Flanges According To ASME B16.5. Wafer Type Connection.				
Temperature Limitations	See APPENDIX A				
Valve Operation	--				
Body Construction	Wafer Type, Dual Plate, Long Pattern				
Trim Construction	Fire Tested To BS EN ISO 10497 And API 6FA(Providing Certificate)				
Service	See APPENDIX A				
Notes: 1. Face To Face Dimensions To Dual-Plate Lug Type Check Valve Of API 594 Type A. Short Pattern Valves Are Not Acceptable. 2. Valves To Be Suitable For Full Vacuum. 3. Valves To Be Asbestos Free. 4. Hydraulic Test According To API 598 / ASME B16.34. 5. Inner Or Outer Leakage Is Not Acceptable. 6. Material Certification: EN 10204 Type3.1. 7. Valve Design Life is 25 Years.			Packing Material: Emission Free Material		
			Gasket Material Manufacturer Standard/More Than The Gasket Material Of The Corresponding Class In CMIT-240048-728-PIP-15.03-3001		
			Additional Requirements: See Specification		
Valve Check List					
Approved Manufacturer		Manufacturer Figure Number		Nominal Size Range	
				2"-18"	
Valve Type	Wafer Check Valve		Tag Number CK-3P02		
Piping Class	3P0		Specification Number CMIT-240048-728-PIP-15.03-3001		