GUJARAT GAS

DATASHEET FOR CHECK VALVE – SRM, IMS, DRS, CNG-PRS AND IPRS (150# / 300#)

Document No.: GGL/TS/2021/JAN/09

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Sr. No.	Description	WAFER TYPE CHECK VALVE	SWING TYPE CHECK VALVE
		Specification	Specification
1. General			
1.1	Valve Size	2" and above	Vendor to furnish
1.2	Pressure Rating	150#/300#	150#/300#
1.3	Design Standard	API 6D	API 6D
1.4	Corrosion allowance		1.5 mm
2. Service Conditions			
2.1	Service	Natural Gas	Natural Gas
2.2	Design Pressure	1. For 150# - 19 Bar-g 2. For 300# - 49 Bar-g	1. For 150# - 19 Bar-g 2. For 300# - 49 Bar-g
2.3	Design Temperature	0°C to 65°C	0°C to 65°C
2.4	Operating Pressure Maximum	19 Bar-g for 150# application 49 Bar-g for 300# application	19 Bar-g for 150# application 49 Bar-g for 300# application
2.5	Operating Temperature	0°C to 50°C	0°C to 50°C
3. Valve Construction Design			
3.1	Location	Above Ground	Above Ground
3.2	Valve Type	Wafer Type	Swing Type
3.3	End Connections	Sandwich Type	Flange End (as per ASME B16.5) as per piping material specification.
3.4	Locking Arrangement	Not Applicable	Not Applicable
3.5	Shutoff Class	Class: IV	Class: IV
3.6	Flange Facing	RF-125 AARH (ASME B 16.5)	RF-125 AARH (ASME B 16.5)
4. Valve Material Specification (Equivalent Or Superior)			
	Part	**Specified Material**	**Specified Material**
4.1	Body	ASTM A 216 Gr WCB (Charpy test at 0°C)	ASTM A 216 Gr WCB (Charpy test at 0°C)

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4.2	Stud and Nuts		Stud-ASTM A 193 Gr. B7 and Nut ASTM A 194 Gr. 2H, Hot Dipped Galvanized as per ASTM A 153
4.3	Body Gasket		Spiral Wound with inner & outer ring SS 316 with CNAF fill
4.4	Disc/ Plate	ASTM A 217 Gr. CA15	ASTM A 216 Gr. WCB + 13% Cr. Steel
4.5	Body Seat Ring	ASTM A 216 Gr. WCB + 13% Cr. Steel	ASTM A 216 Gr. WCB + 13% Cr. Steel
4.6	Disc Hinge	ASTM A 217 Gr. CA15/ SS316/ ASTM A 352 Gr. LCB	ASTM A 216 Gr. WCB + 13% Cr. Steel/ ASTM A 352 Gr. LCB/LCC + 13% Cr. Steel
4.7	Hinge Pin	ASTM A 479 Gr. SS410/ SS316	ASTM A 479 Gr. SS410/ SS316
4.8	Holder	SS 316	
4.9	Clip	SS 316	
4.10	Spring	SS 316/ Inconel X 750	SS 316
5. Valve Testing Requirement			
5.1	Hydrostatic Test	Body: 1.5 X Design Pressure Seat: 1.1 X Design Pressure	Body: 1.5 X Design Pressure Seat: 1.1 X Design Pressure
5.2	Charpy Impact Test	All pressure containing part as per the MOC standard In case Charpy test value not specified in relevant codes and standards than Charpy shall be carried out at 0 °C and absorbed energy value shall be average 35 J and minimum 28 J respectively.	All pressure containing part as per the MOC standard In case Charpy test value not specified in relevant codes and standards than Charpy shall be carried out at 0 °C and absorbed energy value shall be average 35 J and minimum 28 J respectively.
5.3	Hardness test	Applicable as per Material of construction standard	Applicable as per Material of construction standard
5.4	NDE Test	100% Radiography	100% Radiography
5.5	Marking & Painting	As per API 6D	As per API 6D/ MSS SP-25

Note:

1. Inspection and testing:
    - Wafer Type Check Valve: As per this Data Sheet, GGL Specification, API 6D. Inspection shall be carried out by TPI at Manufacture's work as per QAP approved by GGL.

- Swing Type Check Valve: As per this Data Sheet, GGL Specification, API 6D and API 598. Inspection shall be carried out by TPI at Manufacture's work as per QAP approved by GGL.

2. Vendor to submit GA drawing and QAP for approval prior to commencement of manufacturing.
3. Test Certificates shall be reviewed by client/TPIA as per approved QAP, GA drawing, Inspection & Test certificates including NDE.
4. In case valve is supplied in accordance with API 6D, Min. body valve thickness shall be as per ASME B 16.34 and corrosion allowance.

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