

DATA SHEET FOR FLANGES AND BLIND FOR SRM, IMS, DRS, CNG-PRS & IPRS		
Sr. No.	Description	Specification
GENERAL		
1	Size	0.5" to 24" NPS
2	Pressure Rating	150#,300#,600#
3	Design Standard	ASME B 16.5/ASME B 16.47/ASME B 16.48
4	Corrosion allowance	1.5MM
5	Design Factor	0.4
SERVICE CONDITIONS		
6	Service Fluid	Natural Gas
7	Design Pressure	150#- 19 Barg, 300# - 49 Barg, 600# - 98 Barg
8	Design Temperature	1. 150#/300# = 0 to 65 °C 2. 600# = -10 to 65 °C
9	Operating Pressure (Maximum)	19 barg / 42 barg / 90 barg
10	Operating temp.	1. 150#/300# = 0 to 50 °C 2. 600# = -10 to 50 °C
CONSTRUCTION DESIGN		
11	Allowable Stress	ASME B 31.8
12	Flange Type	WNRF/BLRF/ SORF / BLIND
13	Flange Facing	Raised face (125 AARH)
14	Bevel End & Bevel Angle for WNRF	ASME B 31.8
MATERIAL SPECIFICATION		
	Part	Specified Material
15	Material of Construction	1. 150#/300# = ASTM A 105 2. 600# = ASTM A 350 Gr. LF2, MSS SP 44 Gr.F52, MSS SP 44 Gr.F65 The carbon content is greater than 0.12% in product analysis, the CE (IIW) shall not exceed 0.40% and if The carbon content is less than 0.12% in product analysis, the CE (Pcm) shall not exceed 0.20%.

TESTING & INSPECTION		
16	Charpy Impact Test	As per Material of construction 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.
17	Hardness test	<ul style="list-style-type: none"> • ASTM A 105 – 137 to 187 HB. • ASTM A 350 Gr. LF2- 197HBW max • MSS SP 44- 235 BHN max In case hardness value not given in MOC then hardness value shall not exceed 235 HBN
18	Tensile test	As per relevant code and standard
19	Yield Strength	As per relevant code and standard
20	Elongation	As per relevant code and standard
21	UT	100% Surface
22	MPT	100% at Bevel Ends
23	DPT	100% bevel end for 50 mm width
24	Marking	MSS SP 25 and GGL Specification
NOTE:-		
1. Bidder shall clearly mention deviation, if any.		
2. Inspection and Testing shall be as per this Data Sheet, GGL Specification. Inspection shall be carried out by TPI at Manufacture's work as per QAP approved by GGL		
3. Vendor to submit QAP for approval prior to commencement of manufacturing		

DATA SHEET FOR SEAMLESS FITTINGS FOR SRM, IMS, DRS, CNG-PRS & IPRS		
Sr. No.	Description	Specification
GENERAL		
1	Size	0.5 to 24" NB
2	Schedule no./ Pressure Rating	
a)	Butt-welded fittings/ Weld-o-let	STD/XS/ XXS SCH.40, SCH 80, SCH 160
b)	Socket welded fittings, sock-o-let	3000#, 6000#
3	Design Standard	ASME B 16.9/ASME B 16.11/MSS SP 75/ MSS-SP 97/ ASME B1.20.1/ ASME B 16.48
4	Corrosion allowance	1.5MM
5	Design Factor	0.4
SERVICE CONDITIONS		
6	Service Fluid	Natural Gas
7	Design Pressure	19 Bar-g /49 Bar-g/98 Bar-g
8	Design Temperature	1. 150#/300# : 0 to 65°C 2. 600# : -10 to 65°C
9	Operating Pressure (Maximum)	1. 150# = 16 Bar-g 2. 300# = 42 Bar-g 3. 600# = 90 Bar-g
10	Operating temp.	1. 150#/300# = 0 to 50 °C 2. 600# = -10 to 50 °C
CONSTRUCTION DESIGN		
11	Bevel angle	ASME B 31.8
MATERIAL SPECIFICATION		
	Part	Specified Material
12	Material of Construction	1. 150# & 300# :ASTM A 105, ASTM A 234 WPB, MSS SP 75 WPHY 52 2. 600# = ASTM A 350 Gr. LF2, ASTM A 420 Gr. WPL6, MSS SP 75 WPHY 52, MSS SP 75 WPHY 65 The carbon content is greater than 0.12% in product analysis, the CE (IIW) shall not exceed 0.40% and if the carbon content is less than 0.12% in product analysis, the CE (Pcm) shall not exceed 0.20%.


TESTING & INSPECTION		
13	Proof test (Type Test)	ASME B 16.9
14	Charpy Impact Test	Required for all pressure containing part. 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.
15	Hardness test	<ul style="list-style-type: none"> ASTM A 105 – 137 to 187 HB ASTM A 350 Gr. LF2, A420 Gr. WPL6 & ASTM A 234 WPB – 197 HBW max MSS SP 75 – 235 BHN max In case hardness value not given in MOC then hardness value shall not exceed 235 HBN
16	Tensile test	As per relevant code and standard
17	Yield strength (Minimum)	As per relevant code and standard
18	Elongation	As per relevant code and standard
20	UT	100% Surface
21	MPT	100% at Bevel Ends
22	DPT	100% bevel end for 50 mm width
23	Marking	MSS SP 25 and GGL Specification
NOTE:-		
1. Bidder shall clearly mention deviation, if any.		
2. Inspection and Testing shall be as per this Data Sheet, GGL Specification. Inspection shall be carried out by TPI at Manufacture's work as per QAP approved by GGL		
3. Vendor to submit QAP for approval prior to commencement of manufacturing		
4. Welded fittings shall be normalized and 100% radio-graphed.		
5. Welded fitting for size 16 inch and above may be acceptable subject to GGL review and approval		



GUJARAT GAS

DATASHEET OF PRESSURE GAUGE			 GUJARAT GAS				
Sr. No.	Technical Description	Specifications					
General							
1	Type	Direct					
2	Mounting	Local					
3	Dial Size	100mm					
4	Standard	As per IS 3624 / EN 837					
5	Design	Solid Baffle wall and blow out back as per EN 837-1, Glycerine Filled					
6	Colour	Aluminium dial with black engraving					
7	Case material	SS304					
8	Bazel Ring	Vendor to Furnish					
Construction							
9	Window material	Shatterproof Glass					
10	Enclosure	IP 67					
11	Pressure Element	C Type Bourdon Tube					
12	Element Material	SS316					
13	Socket material	SS316					
14	Accuracy	±1% FSD					
15	Connection	1/2"NPT(M)					
16	Connection Location	Bottom					
17	Movement	SS 316					
18	Over-range Protection	130%					
19	Blow Out Protection	Required					
Make							
20	Manifold (Tick the requirement–Yes/ No)	3-way 2-Valve Manifold					
21	Make	Vendor to Furnish					
22	Model	Vendor to indicate.					
23	Fluid	Natural Gas					
24	Pressure & Temperature	Select from below as per the Process parameters or tick the requirement					
	Tick the Required Gauge						
	• Pressure Gauge Range	0-250 mbarg	0-4 Barg	0-7 Barg	0-10 Barg	0-25 Barg	0-60 Barg
	• Design Pressure	19 Barg	19 Barg	19 Barg	19 Barg	19 Barg	49 Barg
	• Operating Pressure	0 - 110 mBarg	0.5 - 3 Barg	0.5 - 5 Barg	0.5 – 6 Barg	3-16 Barg	10 - 40 Barg
	• Design Temperature	0-65 °C	0-65 °C	0-65 °C	0-65 °C	0-65 °C	-10 to 65 °C
Note:							
1.0 Vendor shall provide calibration certificates.							

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DATASHEET OF DIFFERENTIAL PRESSURE GAUGE			 GUJARAT GAS
Sr. No.	Technical Description	Specifications	
1	Tags / Qty	As per P&ID	
2	Mounting	Local	
3	Confirming Standard	As per IS 3624	
4	Dial Size	100mm	
5	Over Pressure Limit	Bidirectional	
6	Colour	White (Non rusting plastic with black engraving)	
7	Case material	SS304/SS316	
8	Bezel Ring	Bayonet	
CONSTRUCTION			
9	Window material	Shatterproof Glass	
10	Enclosure	IP 65	
11	Sensor	Piston Type	
12	Pointer	Main pointer - Black Aluminium Follower pointer / maxima pointer (Additional) – Red	
13	Accuracy	±2% FSD	
14	Zero Adjustment	Vendor to Furnish	
15	Connection	1/ 4” NPT(M)	
16	Connection Location	Horizontal	
17	Movement	Vendor to Furnish	
15	Over-range Protection	Vendor to furnish	
16	Blow Out Protection	Vendor to furnish	
18	Manifold	5-way 3-Valve Manifold	
19	Make	*	
20	Calibration	Required	
21	Fluid	Natural Gas	
	TAG	RANGE	DESIGN PRESSURE
	DPG-0101	0-1 bar	150#- 19 Barg /300# - 49 Bar g
Note:-			
1.0 Manufacturer shall perform inspection at his works and calibration certificates shall be furnished to Gujarat Gas Limited.			
2.0 Working pressure range as per GGL requirement. The DP gauge shall have static pressure Withstanding capability as above.			
3.0 (*) Vendor shall procure DPG as per given approved vendor list of Gujarat Gas Limited			