



**PETROVIETNAM LOW PRESSURE GAS DISTRIBUTION
JOINT STOCK COMPANY**


PROJECT

**TIEN HAI – THAI BINH LOW PRESSURE GAS DISTRIBUTION
PIPELINE SYSTEM**

PHASE

DEHYDRATION

**MAGNETIC LEVEL GAUGE
WITH LEVEL TRANSMITTER**

A	12/12/2014	Issued for Review	TVN	LDB	NHC		
			Prepared by	Checked by	Approved by	Checked by	Approved by
Rev	Date	Description	Alpha-ECC			PVGAS D	
 Contractor: ALPHA – ECC			Contractor's Document Number: KTA.TB-PAC03-J13-00				
			Total pages: 5 (Incl. this page)				



CUSTOMER : PVGAS D
 LOCATION : VIETNAM
 AREA : BLOCK 102 & 106 - PHASE 1
 PROJECT : TB-HR LPGD PIPELINE SYSTEM

ITEM/TAG No. LZT-0133
 DATA SHEET No. KTA.TB-PAC03-J13-001.02
 PROJECT No.
 SHEET 1 OF 4

INSTRUMENT DATA SHEET

MAGNETIC LEVEL GAUGE WITH LEVEL TRANSMITTER

GENERAL	1	Tag No.	LG-0133/LZT-0133		
	2	Service	Flash Vessel		
	3	P&ID No.	KTA.TB-PAC03-M07-003		
	4	Line/Vessel No.	V-101		
	5	Hazardous Area Classification	ZONE 2 , GROUP IIA, T3		
	6	Quantity	1 (One)		
	7				
PROCESS DETAILS	8	Fluid	TEG		
	9	Phase	Liquid		
	10	Operating pressure	Barg	3.9	
	11	Operating temperature	°C	70	
	12	Design pressure	Barg	10	
	13	Design Temperature	°C	100	
	14	Operating differential Pressure	mBar	N/A	
15	Liquid (mixture) density	Kg/m ³	1079		
FLOAT MATERIAL	16	Body or Chamber Material	316SS		
	17	Magnetic Follower/Float Material	316SS		
	18	Flange Material	316SS		
	19	Flange Rating	ASME 150# RF WN		
	20	Process Connection Type	Flanged		
	21	Conn Size & Location : Upper	DN50, Side		
	22	Conn Size & Location : Lower	DN50, Side		
23	Vent / Drain Conn. Type & Size	Flanged 150# RF, DN 20			
INDICATOR	24	Visible Length	1500 mm		
	25	Center To Center Distance	1500 mm		
	26	Indicator Type	Magnetic flap		
	27	Indicator Scale	Magnetic flap		
28	Indicator Scale Material	316 SS			
TRANSMITTER	29	Manufacturer	VTA		
	31	Model No.	VTA		
	32	Service	Magnetic Level Gauge and Level Transmitter		
	33	Function	Indicate/Transmit		
	34	Range	0-100%		
	35	Output	4-20 mA (2-wire), HART comm. Protocol.		
	36	Supply Voltage	24 V DC		
	37	Accuracy	± 0.1% of full span		
	38	Output Action	Increase		
	39	Mounting	Integral Low		
	40	Enclosure: Material	Class	Aluminium (Note 5)	IP65
	41	Contacts : No.	Form		
	42	Conduit Connection	M20x1.5		
43	Ex Certification	EEx:ia IIB T4			
OTHER	44	Mounting	Direct Mounted (Bottom)		
	45	Drain and Vent Valves:	3/4" 150# WNRF FLAGNE		
	46	NACE Compliant	N/A		

- NOTES :
1. Insulation support/clip shall be provided by Vendor for insulation installed by Purchaser.
 2. Refer to P&ID
 3. Transmitter shall be supplied with 316 SS, Ex i, ATEX certified plugs for all spare cable entries
 4. The rolling magnet type of indication with red and yellow follower.
 - 5 Transmitter enclosure/ casing/ junction box shall be epoxy-coated low copper aluminium.



CUSTOMER : PVGAS D
 LOCATION : VIETNAM
 AREA : BLOCK 102 & 106 - PHASE 1
 PROJECT : TB-HR LPGD PIPELINE SYSTEM

ITEM/TAG No. LZT-0142
 DATA SHEET No. KTA.TB-PAC03-J13-005.02
 PROJECT No.
 SHEET 2 OF 4

INSTRUMENT DATA SHEET

MAGNETIC LEVEL GAUGE WITH LEVEL TRANSMITTER

GENERAL					
1	Tag No.			LZT-0142	
2	Service			Glycol Surge Drum	
3	P&ID No.			KTA.TB-PAC03-M07-004	
4	Line/Vessel No.			V-103	
5	Hazardous Area Classification			ZONE 2 , GROUP IIA, T3	
6	Quantity			1 (One)	
7					
PROCESS DETAILS					
8	Fluid			TEG	
9	Phase			Liquid	
10	Operating pressure	Barg			0.20
11	Operating temperature	°C			43-93.4
12	Design pressure	Barg			7.5
13	Design Temperature	°C			100
14	Operating differential Pressure	mBar			N/A
15	Liquid (mixture) density	Kg/m ³			1066.1
17	Body or Chamber Material			316SS	
18	Magnetic Follower/Float Material			316SS	
19	Flange Material			316SS	
20	Flange Rating			ASME 150# RF WN	
21	Process Connection Type			Flanged	
22	Conn Size & Location : Upper			DN50, Side	
23	Conn Size & Location : Lower			DN50, Side	
24	Vent / Drain Conn. Type & Size			Flanged 150# RF, DN 20	
INDICATOR					
25	Visible Length			1900 mm	
26	Center To Center Distance			1900 mm	
27	Indicator Type			Magnetic flap	
28	Indicator Scale			Magnetic flap	
29	Indicator Scale Material			316 SS	
TRANSMITTER					
30	Manufacturer			VTA	
31	Model No.			VTA	
32	Service			Magnetic Level Gauge and Level Transmitter	
33	Function			Indicate/Transmit	
34	Range			0-100%	
35	Output			4-20 mA (2-wire), HART comm. Protocol.	
36	Supply Voltage			24 V DC	
37	Accuracy			± 0.1% of full span	
38	Output Action			Increase	
39	Mounting			Integral Low	
40	Enclosure: Material	Class	Aluminium (Note 5)		IP65
41	Contacts : No.	Form			
42	Conduit Connection			M20x1.5	
43	Ex Certification			EEx:ia IIB T4	
OTHER					
44	Mounting			Direct Mounted (Bottom)	
45	Drain and Vent Valves:			3/4" 150# WNRF FLAGNE	
46	NACE Compliant			N/A	

- NOTES :
1. Insulation support/clip shall be provided by Vendor for insulation installed by Purchaser.
 2. Refer to P&ID
 3. Transmitter shall be supplied with 316 SS, Ex i, ATEX certified plugs for all spare cable entries
 4. The rolling magnet type of indication with red and yellow follower.
 - 5 Transmitter enclosure/ casing/ junction box shall be epoxy-coated low copper aluminium.






CUSTOMER : PVGAS D
 LOCATION : VIETNAM
 AREA : BLOCK 102 & 106 - PHASE 1
 PROJECT : TB-HR LPGD PIPELINE SYSTEM

ITEM/TAG No. LZT-0172
 DATA SHEET No. KTA.TB-PAC03-J13-005.02
 PROJECT No.
 SHEET 3 OF 4

INSTRUMENT DATA SHEET MAGNETIC LEVEL GAUGE WITH LEVEL TRANSMITTER

	1	Tag No.	LZT-0172		
GENERAL	2	Service	Flash Vessel		
	3	P&ID No.	KTA.TB-PAC03-M07-007		
	4	Line/Vessel No.	V-104		
	5	Hazardous Area Classification	ZONE 2 , GROUP IIA, T3		
	6	Quantity	1 (One)		
	7				
	PROCESS DETAILS	8	Fluid	Water	
9		Phase	Liquid		
10		Operating pressure	Barg	0.30	
11		Operating temperature	°C	37	
12		Design pressure	Barg	7.5	
13		Design Temperature	°C	100	
14		Operating differential Pressure	mBar	N/A	
15		Liquid (mixture) density	Kg/m ³	993.4	
FLOAT MATERIAL	17	Body or Chamber Material	316SS		
	18	Magnetic Follower/Float Material	316SS		
	19	Flange Material	316SS		
	20	Flange Rating	ASME 150# RF WN		
	21	Process Connection Type	Flanged		
	22	Conn Size & Location : Upper	DN50, Side		
	23	Conn Size & Location : Lower	DN50, Side		
	24	Vent / Drain Conn. Type & Size	Flanged 150# RF, DN 20		
INDICATOR	25	Visible Length	800 mm		
	26	Center To Center Distance	800 mm		
	27	Indicator Type	Magnetic flap		
	28	Indicator Scale	Graduated in%		
	29	Indicator Scale Material	316 SS		
TRANSMITTER	30	Manufacturer	VTA		
	31	Model No.	VTA		
	32	Service	Magnetic Level Gauge and Level Transmitter		
	33	Function	Indicate/Transmit		
	34	Range	0-100%		
	35	Output	4-20 mA (2-wire), HART comm. Protocol.		
	36	Supply Voltage	24 V DC		
	37	Accuracy	± 0.1% of full span		
	38	Output Action	Increase		
	39	Mounting	Integral Low		
	40	Enclosure: Material	Class	Aluminium (Note 5)	IP65
	41	Contacts : No.	Form		
	42	Conduit Connection		M20x1.5	
	43	Ex Certification		EEx:ia IIB T4	
OTHER	44	Mounting	Direct Mounted (Bottom)		
	45	Drain and Vent Valves:	3/4" 150# WNRF FLAGNE		
	46	NACE Compliant	N/A		

- NOTES :
1. Insulation support/clip shall be provided by Vendor for insulation installed by Purchaser.
 2. Refer to P&ID
 3. Transmitter shall be supplied with 316 SS, Ex i, ATEX certified plugs for all spare cable entries
 4. The rolling magnet type of indication with red and yellow follower.
 5. Transmitter enclosure/ casing/ junction box shall be epoxy-coated low copper aluminium.

  	CUSTOMER : PVGAS D	ITEM/TAG No.
	LOCATION : VIETNAM	DATA SHEET No. KTA.TB-PAC03-J13-005.02
	AREA : BLOCK 102 & 106 - PHASE 1	PROJECT No. AL-3098
	PROJECT : TBHR GAS DISTRIBUTION AND GATHERING	SHEET 4 OF 4

INSTRUMENT DATA SHEET

MAGNETIC LEVEL GAUGE WITH LEVEL TRANSMITTER- NOTES

GENERAL NOTES

1. Documentation Required:
 - Hazardous Area Certificate - ATEX certification
 - Ingress Protection Certificate
 - Hydrotest Certificate
 - Calibration Certificate
 - Material Certificate, ISO-EN 10204, Type 3.1 (B) for pressure retaining parts.
 - Installation & Commissioning spare Parts List and 2 years Operational Spares List
 - Compliance/ Conformance Certificate
 - General Arrangement drawing with complete Model Numbers, Dimension and Hookup details
2. All instruments shall be provided with a SS 316 name plate with tag no. permanently inscribed
3. Level transmitters and accessories shall be able to sustain process design pressure, temperature and service fluid.
4. Level transmitters and accessories should meet the following specifications:
 - Specification for instrumentation KTA.TB-PAC03-M65-007
5. Elastomer used in the instrument / accessories are compatible with the service fluid specified at design conditions.
6. All tube fittings shall be SS316, of Swagelok make, imperial size, double compression type.
7. Field bus based transmitter/ devices must satisfy the requirements of the field bus registration laboratory with applicable checkmark of foundation field bus.
8. The field bus instruments in hazardous area shall be certified as per entity concept or shall be FISCO approved.
9. Internal software shall be configured by the vendor including the following information such as serial number, Device Tag (Tag Number) and Process description.
10. Bolts/nut ASTM A193 Gr.B7/A194-2H with xylan flouorocarbon coated