



中海油石化工程有限公司
CNOOC Petrochemical Engineering Co., Ltd.

DATA SHEET FOR
LEVEL INSTRUMENT
(OIL AND GAS SYSTEM)

Owner Doc.No.	CMIT-240048-728-INS-15.17-1006	
Job's Doc. No.	253001D0728IN01021	
Phase	Detailed Design	
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Company:



CNOOC IRAQ LIMITED

Project:

FQN NEW DEGASSING STATION UPGRADING PROJECT

Unit:

FQN DEGASSING STATION

Contract No.:

CMIT-PRT-10.53-240048

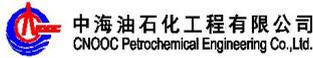
Discipline

Name

Date

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GENERAL	1	Tag Number	P&ID No.	LDIT-2817221A	PCS-15.11-0004	Rev.
	2	Service	SEP-281722A Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281722A	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1.15	67~73	
	13	Distan. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
	23					
	24					
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
	34					
	35					
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

Notes: 1. Transmitters shall meet the requirements of "CMIT-240048-728-INS-15.03-0001 INSTRUMENT GENERAL SPECIFICATION". 2. Transmitters shall be factory calibrated and calibration certificate shall be provided. 3. Ambient Temperature: -5°C~+55°C. Metallic surface temperature under direct sunlight: 80°C. Humidity range: 25%~80%. 4. Wet-material shall be suitable for chloride (147200 mg/L(in water), water cut 0~95%). 5. All material used in sour service shall meet the requirements of NACE MR0175/ISO 15156.



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GENERAL	1	Tag Number	P&ID No.	LDIT-2817221B	PCS-15.11-0006	Rev.
	2	Service	SEP-281722B Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281722B	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1.15	67~73	
	13	Distanc. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
	23					
	24					
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
	34					
	35					
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

Notes: 1. Transmitters shall meet the requirements of "CMIT-240048-728-INS-15.03-0001 INSTRUMENT GENERAL SPECIFICATION". 2. Transmitters shall be factory calibrated and calibration certificate shall be provided. 3. Ambient Temperature: -5°C~+55°C. Metallic surface temperature under direct sunlight: 80°C. Humidity range: 25%~80%. 4. Wet-material shall be suitable for chloride (147200 mg/L(in water), water cut 0~95%). 5. All material used in sour service shall meet the requirements of NACE MR0175/ISO 15156.



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GENERAL	1	Tag Number	P&ID No.	LDIT-2817222A	PCS-15.11-0004	Rev.
	2	Service	SEP-281722A Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281722A	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1.15	67~73	
	13	Distan. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
		23				
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
		34				
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

Notes: 1. Transmitters shall meet the requirements of "CMIT-240048-728-INS-15.03-0001 INSTRUMENT GENERAL SPECIFICATION". 2. Transmitters shall be factory calibrated and calibration certificate shall be provided. 3. Ambient Temperature: -5°C~+55°C. Metallic surface temperature under direct sunlight: 80°C. Humidity range: 25%~80%. 4. Wet-material shall be suitable for chloride (147200 mg/L(in water), water cut 0~95%). 5. All material used in sour service shall meet the requirements of NACE MR0175/ISO 15156. 6. SIL class: SIL2.



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	2	Service	SEP-281722B Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281722B	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1.15	67~73	
	13	Distanc. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
		23				
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
		34				
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

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	2	Service	SEP-281723A Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281723A	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1	67~73	
	13	Distanc. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
		23				
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
		34				
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
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GENERAL	1	Tag Number	P&ID No.	LDIT-2817231B	PCS-15.11-0007	Rev.
	2	Service	SEP-281723B Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281723B	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1	67~73	
	13	Distan. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
		23				
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
		34				
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

Notes: 1. Transmitters shall meet the requirements of "CMIT-240048-728-INS-15.03-0001 INSTRUMENT GENERAL SPECIFICATION". 2. Transmitters shall be factory calibrated and calibration certificate shall be provided. 3. Ambient Temperature: -5°C~+55°C. Metallic surface temperature under direct sunlight: 80°C. Humidity range: 25%~80%. 4. Wet-material shall be suitable for chloride (147200 mg/L(in water), water cut 0~95%). 5. All material used in sour service shall meet the requirements of NACE MR0175/ISO 15156.



中海油石化工程有限公司
CNOOC Petrochemical Engineering Co., Ltd.

DATA SHEET FOR RADIO-FREQUENCY CONDUCTANCE LEVEL TRANSMITTER (OIL AND GAS SYSTEM)

Owner Doc.No.	CMIT-240048-728-INS-15.17-1006	
Job's Doc. No.	253001D0728IN01021	
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GENERAL	1	Tag Number	P&ID No.	LDIT-2817232A	PCS-15.11-0005	Rev.
	2	Service	SEP-281723A Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281723A	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1	67~73	
	13	Distan. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
		23				
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
		34				
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

Notes: 1. Transmitters shall meet the requirements of "CMIT-240048-728-INS-15.03-0001 INSTRUMENT GENERAL SPECIFICATION". 2. Transmitters shall be factory calibrated and calibration certificate shall be provided. 3. Ambient Temperature: -5°C~+55°C. Metallic surface temperature under direct sunlight: 80°C. Humidity range: 25%~80%. 4. Wet-material shall be suitable for chloride (147200 mg/L(in water), water cut 0~95%). 5. All material used in sour service shall meet the requirements of NACE MR0175/ISO 15156. 6. SIL class: SIL2.



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DATA SHEET FOR RADIO-FREQUENCY CONDUCTANCE LEVEL TRANSMITTER (OIL AND GAS SYSTEM)

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Job's Doc. No.	253001D0728IN01021	
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GENERAL	1	Tag Number	P&ID No.	LDIT-2817232B	PCS-15.11-0007	Rev.
	2	Service	SEP-281723B Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281723B	4000mm I.D. ×30000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.70 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1	67~73	
	13	Distan. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~4000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	4150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
		23				
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	4250mm	
		34				
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

Notes: 1. Transmitters shall meet the requirements of "CMIT-240048-728-INS-15.03-0001 INSTRUMENT GENERAL SPECIFICATION". 2. Transmitters shall be factory calibrated and calibration certificate shall be provided. 3. Ambient Temperature: -5°C~+55°C. Metallic surface temperature under direct sunlight: 80°C. Humidity range: 25%~80%. 4. Wet-material shall be suitable for chloride (147200 mg/L(in water), water cut 0~95%). 5. All material used in sour service shall meet the requirements of NACE MR0175/ISO 15156. 6. SIL class: SIL2.



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DATA SHEET FOR RADIO-FREQUENCY CONDUCTANCE LEVEL TRANSMITTER (OIL AND GAS SYSTEM)

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Job's Doc. No.	253001D0728IN01021	
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GENERAL	1	Tag Number	P&ID No.	LDIT-2818222A	PCS-15.11-0003	Rev.
	2	Service	SEP-281821A Interface Measurement			
	3	Equipment No.	Equipment Size	SEP-281821A	2000mm I.D. ×10000mm L S/S	
	4	Equipment Class	Equipment Material	SA 516 Gr.60 N(HIC&SSC)		
	5	Insulation				
PROCESS CONDITIONS	6	Upper Fluid	Lower Fluid	OIL & WATER	OILY WATER	
	7	Upper Fluid State	Lower Fluid State	LIQUID	LIQUID	
	8	U. Oper. Density kg/m ³	L. Oper. Density kg/m ³	925~975	975~1161	
	9	U. Dyn.Viscosity mPa.s	L. Dyn.Viscosity mPa.s	14.4~40	0.4	
	10	U. Kin.Viscosity mm ² /s	L. Kin.Viscosity mm ² /s			
	11	Design Pressure MPa(G)	Design Temperature °C	2.2	100	
	12	Oper. Pressure MPa(G)	Oper. Temperature °C	1.2	67~73	
	13	Distan. Between U/L Nozzles mm				
PROBE	14	Type	Model			
	15	Meas. Principle	Mounting Style	Radio-Frequency Conductance	Top of Tank	
	16	Range	Accuracy	0~2000mm	±1.0 % F.S.	
	17	Allow Oper. Temp. °C	Body Material	-40~150 °C	S32760	
	18	Probe Type	Probe Material	VTA	S32760	
	19	Probe Size	Insert Depth	VTA	2150mm	
	20	Process Conn. Type	Process Conn. Size	Flange	6"	
	21	Flange Standard	Flange Rating	ASME B16.5	300LB	
	22	Flange Material	Facing	316SS	RF	
		23				
TRANSMITTER	25	Model	Mounting Style	Integral	Top of Tank	
	26	Output Signal	Communication Mode	4~20mA DC	HART	
	27	Spark Enclosure	K Indemnification			
	28	Response Time	Indicator Type	VTA	Integral, LCD	
	29	Contact Form	Contact Rating			
	30	Power Supply	Elec. Conn.	24VDC/loop supply	1/2"NPT(F)×2	
	31	Explosion Proof	Enclosure Protection	Ex db II B T4 Gb	IP65	
	32	Housing Material	RF Immunity	304SS	YES	
	33	Flange tube length	Flange to bottom of tank	250mm	2250mm	
		34				
ACCESSORIES	36	Special Cable	Cable Length			
	37	Indicator Type	Display	Integral	LCD	
	38	Tank Side Indicator				
	39	Mounting Set				
	40	Cooling Extension				
	41	Custody Transfer Certification				
	42	Surge Protection Device	Yes			
	43	Sun Shade	Yes, 210×365×111mm 304SS			
44	Nameplate	Yes, SS				
PURCHASE	45	Manufacturer	PO No.			
	46	Price	SN	Item No.		

Notes: 1. Transmitters shall meet the requirements of "CMIT-240048-728-INS-15.03-0001 INSTRUMENT GENERAL SPECIFICATION". 2. Transmitters shall be factory calibrated and calibration certificate shall be provided. 3. Ambient Temperature: -5°C~+55°C. Metallic surface temperature under direct sunlight: 80°C. Humidity range: 25%~80%. 4. Wet-material shall be suitable for chloride (147200 mg/L(in water), water cut 0~95%). 5. All material used in sour service shall meet the requirements of NACE MR0175/ISO 15156.