







DOC NUMBER:

569-DB7B-AIC-711-001

CLIENT NUMBER:

PRD-AIC-DSH-031

CLIENT:

TAKEDA/BAXALTA

PROJECT:

BURITI EPCVM PROJECT

DATA SHEET TEMPERATURE INDICATING TRANSMITTER-SANITARY

2	26JAN2022	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
1	17NOV2021	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
0	13SEP2021	ISSUED FOR CONSTRUCTION	MAB	MAF	RSP
Α	31MAR2021	60% DD ISSUE	MAB	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV









PRD-AIC-DSH-031 NUMBER: 569-DB7B-AIC-711-001 CLIENT NR: TITLE

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TEMPERATURE INDICATING TRANSMITTER-SANITARY

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Revision	Α	0	1	2	3	4

Revision	Α	0	1	2	3	4	Revision	Α	0	1	2	3	4	Revision	Α	0	1	2	3	
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TEMPERATURE INDICATING TRANSMITTER-SANITARY

REFERENCE DOCUMENTS

7B-Z-0-2-01	DRUG SUBSTANCE - 250L MEDIA PREP TANK - TQ-5101 & MEDIA DIST.
7B-Z-0-2-02	DRUG SUBSTANCE - 4500L MEDIA PREP TANK - TQ-5102
7B-Z-0-2-03	DRUG SUBSTANCE - 3800L MEDIA HOLD TANK - TQ-5201
7B-Z-0-2-04	DRUG SUBSTANCE - 3800L MEDIA HOLD TANK - TQ-5202
7B-Z-0-2-10	DRUG SUBSTANCE - 320L BIOREACTOR, BRE-5501 VESSEL
7B-Z-0-2-12	DRUG SUBSTANCE - 2500L BIOREACTOR BRE-5601 - VESSEL
7B-Z-0-2-14	DRUG SUBSTANCE - 2500L BIOREACTOR N°2, BRE-5602 - VESSEL
7B-Z-0-2-20	DRUG SUBSTANCE - COLLECTION VESSEL FEED PIPING DISTRIBUTION
7B-Z-0-2-21	DRUG SUBSTANCE - 3400L COLLECTION - TANK N°1, TQ-5701
7B-Z-0-2-22	DRUG SUBSTANCE - 3400L COLLECTION - TANK N°2, TQ-5702
7B-Z-0-2-24	DRUG SUBSTANCE - 4200L HARVEST TANK N°1, TQ-5901
7B-Z-0-2-25	DRUG SUBSTANCE - 4200L HARVEST TANK N°2, TQ-5902
7B-Z-0-2-27	DRUG SUBSTANCE - MAB CHROMATOGRAPHY - N°1, CRM-3401
7B-Z-0-2-33	DRUG SUBSTANCE - 500L BUFFER PREP TANK N°1, TQ-3701
7B-Z-0-2-34	DRUG SUBSTANCE - 3000L BUFFER PREP N°2 TANK, TQ-3702
7B-Z-0-2-35	DRUG SUBSTANCE - 3000L BUFFER PREP N°3 TANK, TQ-3703
7B-Z-0-2-37	DRUG SUBSTANCE - BUFFER DOCKING SMALL & SMALL BUFFER HOLD
7B-Z-0-2-39	DRUG SUBSTANCE - BUFFER DOCKING LARGE & BUFFER HOLD LARGE
7B-Z-0-2-40	DRUG SUBSTANCE - DILUTION BUFFER HOLD
7B-Z-0-2-55	DRUG SUBSTANCE - PORTABLE VESSEL CIP/SIP STATION, STA-4701
7B-Z-0-2-57	DRUG SUBSTANCE - PURIFIED WATER STORAGE TANK, TQ-6302
7B-Z-0-2-60	DRUG SUBSTANCE - HOT WFI STORAGE TANK TQ-6401
PRD-AIC-LIS-010	DRUG SUBSTANCE - PCS - INSTRUMENT INDEX
PRD-AIC-LIS-046	INTEGRATED PROJECT SERVICES - INSTRUMENT SUGGESTED SUPPLIER LIST
PRD-PIP-TSP-501	PIPE CLASS AND SPECIFICATION - TECHNICAL SPECIFICATION

GENERAL NOTES

- 1 Transmitters must have the following characteristics:
- a) They must be electronic, intelligent and programmable, with signal transmission from 4 to 20mA to two galvanically isolated wires from the power supply;
- b) Withstand the respective maximum static design pressures;
- c) They must be able to identify internal failures;
- d) Be able to define the output signal value, programmable in 0% or 100% of the range, in case of failure of the sensor element;
- 2 All transmitters must have enclosures, whose parts exposed to the atmosphere are resistant to environmental conditions, including those generated by the condition of the process, enabling light external cleaning.
- 3 The identification plates must be manufactured in stainless steel AISI 304, permanently attached to the instruments with tag and serial number. The serial number of the instrument, when possible, can be engraved on the body itself.
- 4 The identification plates must be manufactured in stainless steel AISI 304, permanently attached to the instruments with tag and serial number. The serial number of the instrument, when possible, can be engraved on the body itself.
- 5 The manufacturer must inform in the catalog of the transmitter the dimensions of the same for installation in the place indicated in the project.
- 6 The liquid crystal instrument display with internal illumination for all the information that is necessary for its calibration and indication of necessary variables.
- 7 All transmitters must be provided with protection type certificates compatible with the respective area classification. If the enclosure requires certificates regarding type and degree of protection, both proofs must be explicit in the same certificate. The certificates must be
- 8 Grounding rings must be provided in compatible material, with the instrument box and easy access for assembly, being at least AISI 316
- 9 According to the internal length of the thermowell
- 10- As partes em contato com o fluido de processo devem ter lixamento mecânico internamente padrão ASME BPE SF4 com Ra.≤ 0,38 μm de acordo com tabela SF-2.4-1 ASME BPE-2019 e externo.Ra.≤ 0,8 μm.

REVISION 0 - NOTES

1- REVISED AS PER INSTRUMENT LIST NUMBER PRD-AIC-LIS010_B_PCS_INSTRUMENT_INDEX AND BACKLOG NUMBER 99000-184.0
2021.03.30 - A&IC DOCUMENTS - COMMENTS_REV.01

REVISION 1 - NOTES

1 - ACCORDING NEW ARQUITECTURE UPDATED

REVISION 2 - NOTES

1 - ACCORDING TO LINE SPECIFICATION - SS3 TO SS10
2 - ADDED INSTRUMENTS: TIT-330113 / TIT-330014 / TIT-570125A /
TIT-570225A









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MODEL

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TEMPERATURE INDICATING TRANSMITTER-SANITARY

INSTRUMENT TAG NUMBER TIT-330013 SERVICE FROM LOAD FILTER PRODUCT SUPPLY 2 3 P&ID 7B-Z-0-2-27 PIPE LINE EQUIPMENT NUMBER 3/4"-SFIC-330013-SS10-PP 4 EQUIPMENT MATERIAL / PIPE 316L SS AREA CLASSIFICATION NOT CLASSIFIED ENCLOSURE CLASSIFICATION IP 65 (MÍN.) CONF. NBR IEC 60529 (SEE GENERAL NOTES 7 - PAGE 3) CERTIFICATES TYPE MICROPROCESSED 10 MOUNTING FULL 11 **BODY MATERIAL** ALUMINUM BODY PRESSURE CLASS BY MANUFACTURER 13 METER CASING ALUMINIO (COPPER FREE) **TRANSMITTER** POWER SUPPLY 24 Vcc - 2 WIRE **OUTPUT SIGNAL** 4 - 20 mA (500 ohms @ 24 Vcc) 16 COMMUNICATION PROTOCOL HART 17 18 **PRECISION** ±0,25% F.E 19 REPEATABILITY BY MANUFACTURER CALIBRATION RANGE BY MANUFACTURER 20 CALIBRATED RANGE **ELECTRICAL CONNECTION** 1/2" NPT (F) DJUSTABLE RANGE / AJ. LOCAL ZERO AND SPAN YES / YES 23 MOUNTING FULL

J.R	25	ELEMENT TYPE	ELEMENT MATERIAL	PT100Ω (3 Wire)	PLATINUM	
NS	26	ROD LENGTH (L)	ROD DIAMETER	(NOTE 9, PAGE 3)	6 mm	
SE	27	SENSOR CONNECTION TO WE	LL	1/2" NPT		
	28	HEAD MATERIAL	ELECTRICAL CONNECTION	ALUMINUM	1/2" NPT (F)	
	29	MOUNTING		SUPPLIED WIT	TH SENSOR	

30	MATERIAL			CONICAL MACHINED FROM A BAI
31	CONNECTION TO THE PROCES	S		
32	FLANGE FACE FINISH		MSS S	P-6

l		33	CONNECTION TO THERMOMETER	1/2" NP	T(F)
l	7	34	INSERTION LENGTH "U"		mm
l	VEL	35	EXTENSION LENGTH "T"		mm
I	_	36			

	40					U				
	41					- 0 - 1	•			
	42	FLUID	PHY	SICAL STATE		PRODU	ICT	LIQUID		
CONDITIONS	43	MINIMUM TEMPERATURE	NOF	RMAL	MAXIMUM		℃		℃	
	44	IINIMUM PRESSURE NO		RMAL	MAXIMUM	4	bar-g	4	bar-g	
JVC	45	DESIGN PRESSURE		DESIGN TEMPER	ATURE		bar-g		°C	
	46	VISCOSITY @ OPERATING	CON	IDITION			•	Ср		
TING	47	DENSITY @ OPERATING C	OND	ITION				kg/m³		
RA	48	SUSPENDED SOLIDS (%)								
OPERA.	49									
Ľ	50									
	51	MANUFACTURER		<u> </u>	_		Endress + Ha	user (E+H) or Similar		









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TEMPERATURE INDICATING TRANSMITTER-SANITARY

								2		
	1	INSTRUMENT TAG NUMBEI	7			TI	T-330014			
	2	SERVICE			FF	ROM LOAD FILT	TER PRODUCT SUP	PLY		
	3	P&ID			7B-Z-0-2-28					
ΑΓ	4	PIPE LINE	EQUIPME	NT NUMBER	3/4"-SFIC-330014-SS10-PP -					
GENERAL	5	EQUIPMENT MATERIAL / PI	PE			3	316L SS			
GEN	6	AREA CLASSIFICATION				NOT	CLASSIFIED			
	7	ENCLOSURE CLASSIFICAT	ION			IP 65 (MÍN.) C	ONF. NBR IEC 6052	9		
	8	CERTIFICATES				(SEE GENERA	L NOTES 7 - PAGE	3)		
	9									
	10	TYPE				MICRO	PROCESSED			
	11	MOUNTING			FULL					
	12	BODY MATERIAL				AL	UMINUM			
	13	BODY PRESSURE CLASS			BY MANUFACTURER					
	14	METER CASING				ALUMINIO	(COPPER FREE)			
TRANSMITTER	15	POWER SUPPLY				24 V	cc - 2 WIRE			
MIT	16	OUTPUT SIGNAL				4 - 20 mA (5	00 ohms @ 24 Vcc)			
MS	17	COMMUNICATION PROTOC	OL				HART			
TR/	18	PRECISION				±0),25% F.E			
		REPEATABILITY				BY MAI	NUFACTURER			
		CALIBRATION RANGE				BY MAI	NUFACTURER			
		CALIBRATED RANGE								
		ELECTRICAL CONNECTION			1/2" NPT (F)					
		DJUSTABLE RANGE / AJ. LO	OCAL ZERO AN	ID SPAN	YES / YES					
		MOUNTING		MATERIAL			FULL			
OR		ELEMENT TYPE		Ω (3 Wire)	PL	ATINUM				
SENSOR		ROD LENGTH (L)	(NOTE !	9, PAGE 3)		6 mm				
S		SENSOR CONNECTION TO					1/2" NPT			
	_	HEAD MATERIAL	ELECTRIC	CAL CONNECTION	ALUMINUM 1/2" NPT (F)					
		MOUNTING	TVDE 05	CONSTRUCTION	SUPPLIED WITH SENSOR					
	30	MATERIAL CONNECTION TO THE PRO		CONSTRUCTION	SS316 CONICAL MACHINED FROM A					
	_	FLANGE FACE FINISH	CESS		MCC CD C					
	_	CONNECTION TO THERMO	METER		MSS SP-6 1/2" NPT(F)					
		INSERTION LENGTH "U"	IVILILIX		mm					
77:		EXTENSION LENGTH "T"					mm			
WELI	36	EXTENSION ELINOTTI					111111			
	37				\Box					
	38			Op.,,,,,,		\neg				
	39				ATTION OF THE PERSON OF THE PE	4				
	40									
	41				. U	T				
	42	FLUID	PHYSICAL STA	ATE	PROD	UCT	LIQ	UID		
SNC	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM		°C		°C		
OPERATING CONDITIONS	44	MINIMUM PRESSURE	NORMAL	MAXIMUM	4	bar-g	4	bar-g		
DNC	45	DESIGN PRESSURE	DESIGN T	EMPERATURE		bar-g		℃		
3 CC	46	VISCOSITY @ OPERATING	CONDITION			-	Ср	-		
TINC	47	DENSITY @ OPERATING C	ONDITION				kg/m³			
-RA	48	SUSPENDED SOLIDS (%)								
OPE	49									
	50									
	51	MANUFACTURER				Endress + Ha	user (E+H) or Similar	-		
	52	MODEL								
					·			-		









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I EIV	IP!	ERATURE INDICAT	ING TRANSMI	I I ER-SANI I A	ARY			REV.: 2		
	1	INSTRUMENT TAG NUMBE	R			TIT	-570125A			
	2	SERVICE								
_	_	P&ID			7B-Z-0-2-20					
. –	_	PIPE LINE	EQUIPMENT NU	MBER						
જે ⊢	_	EQUIPMENT MATERIAL / PI					16L SS			
Ä –	-	AREA CLASSIFICATION	·· <u>-</u>				CLASSIFIED			
· -	_	ENCLOSURE CLASSIFICAT	TION				ONF. NBR IEC 60	520		
\vdash	_	CERTIFICATES	1011				L NOTES 7 - PAG			
-	9	OLIVIIIIOATES				(SEE GENERAL	L NOTES 7 - 1 AO	<i>L</i> 3)		
_	_	TYPE				MICPO	PROCESSED			
- 1	_	MOUNTING					FULL			
_ <u>_</u>										
		BODY MATERIAL					UMINUM			
_		BODY PRESSURE CLASS					IUFACTURER			
		METER CASING					(COPPER FREE)			
		POWER SUPPLY					oc - 2 WIRE			
	_	OUTPUT SIGNAL				•	00 ohms @ 24 Vc	c)		
	_	COMMUNICATION PROTOC	COL				HART			
		PRECISION					,25% F.E			
	_	REPEATABILITY					IUFACTURER			
2	20	CALIBRATION RANGE				BY MAN	IUFACTURER			
_		CALIBRATED RANGE								
2	22	ELECTRICAL CONNECTION	V			1/2	" NPT (F)			
	-	DJUSTABLE RANGE / AJ. L	OCAL ZERO AND SPA	N	YES / YES					
		MOUNTING				FULL DIATING				
5 2	25	ELEMENT TYPE	RIAL	PT1000	Ω (3 Wire)	,	PLATINUM			
	26	ROD LENGTH (L)	(NOTE 9	9, PAGE 3)		6 mm				
2	27	SENSOR CONNECTION TO		1.	/2" NPT					
2	28	HEAD MATERIAL	ELECTRICAL CO	NNECTION	ALUMINUM 1/2" NPT (F)					
2	29	MOUNTING			SUPPLIED WITH SENSOR					
3	30	MATERIAL	TYPE OF CONST	RUCTION	SS316 CONICAL MACHINED FROM A					
3	31	CONNECTION TO THE PRO	OCESS							
3	32	FLANGE FACE FINISH			MSS SP-6					
3	33	CONNECTION TO THERMO	METER		1/2" NPT(F)					
3	34	INSERTION LENGTH "U"			mm					
	35	EXTENSION LENGTH "T"					mm			
3	36				_		•			
3	37				-					
3	38									
3	39			U	411114					
4	40									
_	41				U	T				
	42	FLUID	PHYSICAL STATE		PROD	UCT	L	IQUID		
2 -	43	MINIMUM TEMPERATURE	NORMAL	MAXIMUM		°C		°C		
> ⊢		MINIMUM PRESSURE	NORMAL	MAXIMUM	4	bar-g	4	bar-g		
	_	DESIGN PRESSURE	DESIGN TEMPE		-	bar-g	-	°C		
E		VISCOSITY @ OPERATING				1	Ср			
	-	DENSITY @ OPERATING C					kg/m³			
E	_	SUSPENDED SOLIDS (%)					<i>y</i>			
ŀΕ	49									
	50									
_	_	MANUFACTURER				Endress : Usi	user (E+H) or Sim	ilar		
		MODEL				Liluicss + Mal	JOEI (L+IT) UI OIIIII	nai .		
	0∠	WODEL								









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TEMPERATURE INDICATING TRANSMITTER-SANITARY

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. 	PERATURE INDICAT	ING TRANSMIT					REV.: 2		
1	INSTRUMENT TAG NUMBE	TR			TIT	-570225A			
2	SERVICE								
3				7B-Z-0-2-20					
. —		EQUIPMENT NU	MBER						
GENERAL 5 6						I			
H 6		·· <u>-</u>				CLASSIFIED			
7		TION				ONF. NBR IEC 60	520		
8		1011				L NOTES 7 - PAG			
9					(SEE OLIVEIVAL	INOTES 7 - TAC	IL 3)		
) TYPE				MICPO	PROCESSED			
	1 MOUNTING					FULL			
⊢ i									
	BODY MATERIAL					UMINUM			
	BODY PRESSURE CLASS					IUFACTURER			
	4 METER CASING					(COPPER FREE)			
_	5 POWER SUPPLY					cc - 2 WIRE			
16	6 OUTPUT SIGNAL				•	00 ohms @ 24 Vc	c)		
2 17	7 COMMUNICATION PROTO	COL				HART			
	8 PRECISION				±0,	25% F.E			
19	9 REPEATABILITY				BY MAN	IUFACTURER			
20	CALIBRATION RANGE				BY MAN	IUFACTURER			
21	1 CALIBRATED RANGE								
22	2 ELECTRICAL CONNECTION	V			1/2	" NPT (F)			
23	3 DJUSTABLE RANGE / AJ. L	OCAL ZERO AND SPA	N	YES / YES					
24	4 MOUNTING				FULL				
25	5 ELEMENT TYPE	PT1000	2 (3 Wire)		PLATINUM				
25 26	6 ROD LENGTH (L)	(NOTE 9	, PAGE 3)		6 mm				
27	7 SENSOR CONNECTION TO		1,	/2" NPT					
28	8 HEAD MATERIAL	ELECTRICAL CO	NNECTION	ALUMINUM 1/2" NPT (F)					
29	9 MOUNTING	L		SUPPLIED WITH SENSOR					
_	0 MATERIAL	TYPE OF CONST	TRUCTION	SS316 CONICAL MACHINED FROM					
	1 CONNECTION TO THE PRO			<u></u>					
-	2 FLANGE FACE FINISH	70200		MSS SP-6					
-	3 CONNECTION TO THERMO	METER		1/2" NPT(F)					
	4 INSERTION LENGTH "U"	JUIL I LIX		mm					
	5 EXTENSION LENGTH "T"								
: -						mm			
36	_			\Box					
37	-	P	7777777						
38									
39	_	T	U						
40				. U .	г				
41		DUNGIONI OTATE		2000	HOT		101115		
9 42		PHYSICAL STATE	1442/144	PROD			.IQUID		
45 45 45 45 45 45 45 45 45 45 45 45 45 4			MAXIMUM		°C		°C		
44		NORMAL TEMPE	MAXIMUM	4	bar-g	4	bar-g		
45		DESIGN TEMPER	KATUKE		bar-g		℃		
46						Ср			
47		ONDITION				kg/m³			
48	· · · · · · · · · · · · · · · · · · ·								
50									
51					Endress + Hau	user (E+H) or Sim	ilar		
	2 MODEL			Endress + Hauser (E+H) or Similar					









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TEMPERATURE INDICATING TRANSMITTER-SANITARY

								2		
	1	INSTRUMENT TAG NUMBE	R			7B-TIT-37	70111			
	2	SERVICE			R	ETURN CIP S	YSTEM Nº3	1		
	3	P&ID				7B-Z-0-2	2-37			
'AF	4	PIPE LINE	EQUIPMENT N	NUMBER	3/4"-SFIC-370137-SS10-PP -					
GENERAL	5	EQUIPMENT MATERIAL / P.	IPE .		316L SS					
GEI	6	AREA CLASSIFICATION				NOT CLAS	SIFIED			
	7	ENCLOSURE CLASSIFICAT	TION		IP 65	(MÍN.) CONF.	NBR IEC 60	0529		
	8	CERTIFICATES			(SEE (GENERAL NO	TES 7 - PAG	GE 3)		
	9									
	10	TYPE			MICROPROCESSED					
	11	MOUNTING			FULL					
	12	BODY MATERIAL			ALUMINUM					
	13	BODY PRESSURE CLASS			BY MANUFACTURER					
	14	METER CASING			ALUMINIO (COPPER FREE)					
rER	15	POWER SUPPLY				24 Vcc - 2	WIRE			
JIT.	16	OUTPUT SIGNAL			4 - 2	20 mA (500 oh	ms @ 24 Vo	ec)		
TRANSMITTER	17	COMMUNICATION PROTOC	COL			HAR	T			
TRA	18	PRECISION				±0,25%	F.E			
	19	REPEATABILITY				BY MANUFA	CTURER			
	20	CALIBRATION RANGE				BY MANUFA	CTURER			
	21	CALIBRATED RANGE				-				
	22	ELECTRICAL CONNECTION	V			1/2" NP	T (F)			
	23	DJUSTABLE RANGE / AJ. L	OCAL ZERO AND SI	PAN	YES / YES					
	24	MOUNTING			FULL					
ЭR	25	ELEMENT TYPE	ELEMENT MA	TERIAL	PT100Ω (3 W	ire)		PLATINUM		
SENSOR	26	ROD LENGTH (L)	ROD DIAMETE	ER .	BY MANUFACT	BY MANUFACTURER 6 mm				
SE	27	7 SENSOR CONNECTION TO WELL				1/2" NPT				
	28	B HEAD MATERIAL ELECTRICAL CONNECTION			ALUMINUM 1/2" NPT (F)					
	29	MOUNTING			-					
	30	MATERIAL	TYPE OF CON	ISTRUCTION	SS1016L		CONICAL N	ACHINED FROM A BAR		
	31	CONNECTION TO THE PRO	OCESS		ASTM A270 Gr.TP316L, SEAMLESS, TRI-CLAMP CONNECTIO					
	32	FLANGE FACE FINISH			-					
	33	CONNECTION TO THERMO	METER		1/2" NPT(F)					
7		INSERTION LENGTH "U"			220 mm					
WELL	35	EXTENSION LENGTH "T"			BY MANUFACTURER					
	36 37 38 39 40 41		<u> </u>	T U	U					
	42	FLUID	PHYSICAL STATE		PRODUCT			LIQUID		
SNo		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	- ℃		20	℃		
ITIC	-	MINIMUM PRESSURE	NORMAL	MAXIMUM	- bar-g	,	4	bar-g		
OPERATING CONDITIONS	45	DESIGN PRESSURE	DESIGN TEMP	PERATURE	- bar-g)	-	°C		
) C	46	VISCOSITY @ OPERATING	CONDITION		- '	Ср		•		
TING	47	DENSITY @ OPERATING C	ONDITION		-	kg/n	n ³			
RAI	48	SUSPENDED SOLIDS (%)				-				
)PE	49					-				
	-					-				
0	50		Endress + Hauser (E+H) or Similar							
0	_	MANUFACTURER			Endr	ess + Hauser ((E+H) or Sin	nilar		









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TEMPERATURE INDICATING TRANSMITTER-SANITARY

	1	INSTRUMENT TAG NUMBE	7B-TIT-370113						
	2	SERVICE			CHROMATOGRAPHY TO CATION EXCHANGE				
	3	P&ID	7B-Z-0-2-37						
AL	4	PIPE LINE	3/4"-SFIC-370136-SS10-PP -						
IER	5	EQUIPMENT MATERIAL / P.	IPE		316L SS				
GENERAL	6	AREA CLASSIFICATION			NOT CLASSIFIED				
	7	ENCLOSURE CLASSIFICAT	TION		IP 65 (MÍN.) CONF. NBR IEC 60529				
	8	CERTIFICATES			(SEE GENERAL NOTES 7 - PAGE 3)				
	9								
	10	TYPE			MICROPROCESSED				
	11	MOUNTING					FULL		
	12	BODY MATERIAL			ALUMINUM				
	13	BODY PRESSURE CLASS			BY MANUFACTURER				
ER	14	METER CASING			ALUMINIO (COPPER FREE)				
		POWER SUPPLY					cc - 2 WIRE		
Ë	16	OUTPUT SIGNAL			4 - 20 mA (500 ohms @ 24 Vcc)				
NSN		COMMUNICATION PROTOCOL			HART				
TRANSMITTER	18	PRECISION			±0,25% F.E				
7	19	REPEATABILITY			BY MANUFACTURER				
	20	CALIBRATION RANGE			BY MANUFACTURER				
	21	CALIBRATED RANGE		-					
	22	ELECTRICAL CONNECTION	V		1/2" NPT (F)				
	23	DJUSTABLE RANGE / AJ. L	OCAL ZERO AND SPA	N	YES / YES				
	24	MOUNTING			FULL				
R	25	ELEMENT TYPE	ELEMENT MATE	RIAL	PT100Ω (3 Wire)		PL	PLATINUM	
SENSOR		ROD LENGTH (L)	ROD DIAMETER			BY MANUFACTURER		6 mm	
SE		SENSOR CONNECTION TO WELL			1/2" NPT				
	28	3 HEAD MATERIAL ELECTRICAL CONNECTION			ALUMINUM 1/2" NPT			" NPT (F)	
	29	MOUNTING					-		
	30	MATERIAL	TYPE OF CONST	RUCTION	SS1	016L	CONICAL MAC	HINED FROM A BAR	
	31	CONNECTION TO THE PROCESS			ASTM A270 Gr.	TP316L, SEAN	ILESS, TRI-CLAMP	CONNECTION.	
	32	FLANGE FACE FINISH					-		
	33	CONNECTION TO THERMOMETER			1/2" NPT(F)				
	34	INSERTION LENGTH "U"			220 mm				
WELL	35	EXTENSION LENGTH "T"	BY MANUFACTURER						
1	36 37 38 39 40	T			U				
	41								
		FLUID	PHYSICAL STATE		PRODU	JCT	LIG	UID	
SNC	42	FLUID MINIMUM TEMPERATURE		MAXIMUM	PRODL -	JCT °C	20	°C	
SNOIL	42 43			MAXIMUM MAXIMUM	PRODL - -			•	
SNOILIONS	42 43 44	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	℃	20	°C	
3 CONDITIONS	42 43 44 45	MINIMUM TEMPERATURE MINIMUM PRESSURE	NORMAL NORMAL DESIGN TEMPER	MAXIMUM	-	°C bar-g	20	°C bar-g	
TING CONDITIONS	42 43 44 45 46	MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE	NORMAL NORMAL DESIGN TEMPER CONDITION	MAXIMUM	-	°C bar-g	20 4 -	°C bar-g	
RATING CONDITIONS	42 43 44 45 46 47	MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING	NORMAL NORMAL DESIGN TEMPER CONDITION	MAXIMUM	-	°C bar-g	20 4 - Cp	°C bar-g	
OPERATING CONDITIONS	42 43 44 45 46 47	MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING DENSITY @ OPERATING C	NORMAL NORMAL DESIGN TEMPER CONDITION	MAXIMUM	-	°C bar-g	20 4 - Cp	°C bar-g	
OPERATING CONDITIONS	42 43 44 45 46 47 48	MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING DENSITY @ OPERATING C	NORMAL NORMAL DESIGN TEMPER CONDITION	MAXIMUM	-	°C bar-g	20 4 - Cp	°C bar-g	
OPERATING CONDITIONS	42 43 44 45 46 47 48 49 50	MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING DENSITY @ OPERATING C	NORMAL NORMAL DESIGN TEMPER CONDITION	MAXIMUM	-	°C bar-g bar-g	20 4 - Cp	°C bar-g °C	
OPERATING CONDITIONS	42 43 44 45 46 47 48 49 50 51	MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING DENSITY @ OPERATING C SUSPENDED SOLIDS (%)	NORMAL NORMAL DESIGN TEMPER CONDITION	MAXIMUM	-	°C bar-g bar-g	20 4 - Cp kg/m³ -	°C bar-g °C	









TITLE

SHEET:

TEMPERATURE INDICATING TRANSMITTER-SANITARY

10 de 13 REV.: **2**

								2		
	1 INSTRUMENT TAG NUMBER				7B-TIT-370211					
	2	SERVICE	RETURN CIP SYSTEM №3							
	3	P&ID	7B-Z-0-2-39							
ΑL	4	PIPE LINE	3/4"-SFIC-370240-SS10-PP -			-				
IER,	5	EQUIPMENT MATERIAL / P.	316L SS							
GENERAL	6	AREA CLASSIFICATION				NOT CLASSIFIED				
	7	ENCLOSURE CLASSIFICAT	TION		IP 65 (MÍN.) CONF. NBR IEC 60529					
		CERTIFICATES			(SEE GENERAL NOTES 7 - PAGE 3)					
	9				· ·	,		/		
		TYPE				MICROF	PROCESSED			
		MOUNTING					FULL			
		BODY MATERIAL	ALUMINUM							
TRANSMITTER		BODY PRESSURE CLASS	BY MANUFACTURER							
	_	METER CASING								
		POWER SUPPLY			ALUMINIO (COPPER FREE) 24 Vcc - 2 WIRE					
		OUTPUT SIGNAL			24 VCC - 2 WIRE 4 - 20 mA (500 ohms @ 24 Vcc)					
		COMMUNICATION PROTOC		4 - 20 IIIA (500 01IIIIS @ 24 VCC) HART						
SAN	_	PRECISION		+0.25% F.E						
1		REPEATABILITY				±0,25% F.E BY MANUFACTURER				
	_	CALIBRATION RANGE			BY MANUFACTURER BY MANUFACTURER					
		CALIBRATED RANGE			DI MANUFACIURER					
		ELECTRICAL CONNECTION	V		- 1/2" NPT (F)					
				Λ/	YES / YES					
	_	DJUSTABLE RANGE / AJ. LOCAL ZERO AND SPAN MOUNTING			FULL					
~		ELEMENT TYPE	ELEMENT MATE	PΙΔΙ				LATINUM		
SOF			ROD DIAMETER			FACTURER		6 mm		
SENSOR		ROD LENGTH (L) ROD DIAMETER SENSOR CONNECTION TO WELL			BT WANU	1/2" NPT				
ری		HEAD MATERIAL	ELECTRICAL CO	NNECTION	A111A			2" NPT (F)		
	_	MOUNTING	EEEO TRIOAE GO	INILOTION	ALON	un voiu	-	2 747 7 (7)		
					\$\$1	1016L	CONICAL MA	CHINED FROM A BAR		
		MATERIAL TYPE OF CONSTRUCTION CONNECTION TO THE PROCESS					ILESS, TRI-CLAM			
		FLANGE FACE FINISH			710711171270 01	0102, 02, 117	-	00/1/12077074.		
		CONNECTION TO THERMOMETER				1/2'	" NPT(F)			
		INSERTION LENGTH "U"					220 mm			
WELL	_	EXTENSION LENGTH "T"					UFACTURER			
WE	36	EXTENSION ELINOTTI				<i>51 113</i> 11 4	OTTIOTOTIET			
	37				-					
	38			//////		_				
	39		Anna Anna Anna Anna Anna Anna Anna Anna							
	40		'	O						
	41				U					
		FLUID	PHYSICAL STATE		PRODU	JCT	LI	QUID		
NS		MINIMUM TEMPERATURE		MAXIMUM	-	°C	20	℃		
710		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	bar-g	4	bar-g		
NDI		DESIGN PRESSURE	DESIGN TEMPER		-	bar-g	-	°C		
CO		VISCOSITY @ OPERATING CONDITION			-		Ср	_ I		
ING		DENSITY @ OPERATING CONDITION			- kg/m³					
RAT.		SUSPENDED SOLIDS (%)								
OPERATING CONDITIONS	49	(,0)					-			
0	50						-			
		MANUFACTURER			1	Endress + Hau	ser (E+H) or Simila	ar		
		MODEL					, , , , , , , , , , , , , , , , , , , ,			
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TEMPERATURE INDICATING TRANSMITTER-SANITARY

SHEET:

11 de 13

REV.:

	1	INSTRUMENT TAG NUMBEI	R		7B-TIT-370213					
	2	SERVICE			RETURN CIP SYSTEM №3					
	3	P&ID			7B-Z-0-2-39					
AL	4	PIPE LINE	EQUIPMENT NU	IMBER	3/4"-SFIC-370239-SS10-PP -					
GENERAL	5	EQUIPMENT MATERIAL / PI	!PE		316L SS					
GE	6	AREA CLASSIFICATION			NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICAT	TON		IP 65 (MÍN.) CONF. NBR IEC 60529					
	8	CERTIFICATES			(SEE GENERAL NOTES 7 - PAGE 3)					
	9									
	10	TYPE			MICR	OPROCESSED				
	11	MOUNTING			FULL					
	12	BODY MATERIAL			ALUMINUM					
	13	BODY PRESSURE CLASS			BY MANUFACTURER					
	14	METER CASING			ALUMINIO (COPPER FREE)					
TRANSMITTER	15	5 POWER SUPPLY			24	Vcc - 2 WIRE				
ΠI	16	6 OUTPUT SIGNAL			4 - 20 mA (500 ohms @ 24 Vcc)					
NSI	17	7 COMMUNICATION PROTOCOL			HART					
TRA	18	PRECISION			±0,25% F.E					
	19	REPEATABILITY			BY M.	BY MANUFACTURER				
	20	CALIBRATION RANGE			BY MANUFACTURER					
	21	CALIBRATED RANGE			-					
	22	ELECTRICAL CONNECTION	I		1/2" NPT (F)					
	23	DJUSTABLE RANGE / AJ. LO	OCAL ZERO AND SPA	AN .	YES / YES					
		MOUNTING			FULL					
SR	25	ELEMENT TYPE	ELEMENT MATE	RIAL	PT100Ω (3 Wire)	F	PLATINUM			
SENSOR	26	ROD LENGTH (L)	ROD DIAMETER	?	BY MANUFACTURER		6 mm			
SE	27	SENSOR CONNECTION TO	WELL		1/2" NPT					
	28	HEAD MATERIAL	ELECTRICAL CO	ONNECTION	ALUMINUM	⁄2" NPT (F)				
	29	MOUNTING				<u> </u>				
	30	MATERIAL	TYPE OF CONS	TRUCTION	SS1016L CONICAL MACHINED FROM A BA ASTM A270 Gr.TP316L, SEAMLESS, TRI-CLAMP CONNECTION.					
	31	CONNECTION TO THE PRO	CESS		ASTM A270 Gr.TP316L, SE.	AMLESS, TRI-CLAM	IP CONNECTION.			
		FLANGE FACE FINISH				-				
	.3.3	CONNECTION TO THERMOMETER								
						1/2" NPT(F)				
7:	34	INSERTION LENGTH "U"				220 mm				
WELL	34 35	INSERTION LENGTH "U"								
WELL	34	INSERTION LENGTH "U" EXTENSION LENGTH "T"	T	U		220 mm				
	34 35 36 37 38 39 40 41	INSERTION LENGTH "U" EXTENSION LENGTH "T"	PHYSICAL STATE	U		220 mm ANUFACTURER	IQUID			
	34 35 36 37 38 39 40 41 42	INSERTION LENGTH "U" EXTENSION LENGTH "T"	PHYSICAL STATE	MAXIMUM	BY M.	220 mm ANUFACTURER	IQUID °C			
	34 35 36 37 38 39 40 41 42 43	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE	PHYSICAL STATE	MAXIMUM MAXIMUM	BY M. PRODUCT	220 mm ANUFACTURER				
	34 35 36 37 38 39 40 41 42 43 44	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE MINIMUM PRESSURE	PHYSICAL STATE NORMAL	MAXIMUM	PRODUCT - °C	220 mm ANUFACTURER	°C			
	34 35 36 37 38 39 40 41 42 43	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE	PHYSICAL STATE NORMAL NORMAL DESIGN TEMPE	MAXIMUM	PRODUCT - °C - bar-g	220 mm ANUFACTURER	°C bar-g			
	34 35 36 37 38 39 40 41 42 43 44 45	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE	PHYSICAL STATE NORMAL NORMAL DESIGN TEMPE	MAXIMUM	PRODUCT - °C - bar-g	220 mm ANUFACTURER L 20 4	°C bar-g			
	34 35 36 37 38 39 40 41 42 43 44 45 46	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING	PHYSICAL STATE NORMAL NORMAL DESIGN TEMPE	MAXIMUM	PRODUCT - °C - bar-g	220 mm ANUFACTURER L 20 4 - Cp	°C bar-g			
OPERATING CONDITIONS WELL	34 35 36 37 38 39 40 41 42 43 44 45 46 47	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING DENSITY @ OPERATING C	PHYSICAL STATE NORMAL NORMAL DESIGN TEMPE	MAXIMUM	PRODUCT - °C - bar-g	220 mm ANUFACTURER L 20 4 - Cp	°C bar-g			
	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING DENSITY @ OPERATING C	PHYSICAL STATE NORMAL NORMAL DESIGN TEMPE	MAXIMUM	PRODUCT - °C - bar-g	220 mm ANUFACTURER L 20 4 - Cp	°C bar-g			
	34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	INSERTION LENGTH "U" EXTENSION LENGTH "T" FLUID MINIMUM TEMPERATURE MINIMUM PRESSURE DESIGN PRESSURE VISCOSITY @ OPERATING DENSITY @ OPERATING C	PHYSICAL STATE NORMAL NORMAL DESIGN TEMPE	MAXIMUM	PRODUCT - °C - bar-g - bar-g	220 mm ANUFACTURER L 20 4 - Cp	°C bar-g °C			









TITLE

SHEET:

TEMPERATURE INDICATING TRANSMITTER-SANITARY

12 de 13 REV.:

2 SERVICE 3 P&ID 4 PIPE LINE EQUIPMENT NUMBER 5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION 7 ENCLOSURE CLASSIFICATION 8 CERTIFICATES 9 HARVEST TANK N°1, 1"-SFIC-371002-SS10-PI 1"-SFIC-37100-SS10-PI 1"-	7B-TIT-371002 TQ-5701 DILUTION (DO2) BUFFER 7B-Z-0-2-40				
3 P&ID 4 PIPE LINE EQUIPMENT NUMBER 1"-SFIC-371002-SS10-P 5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION NO 7 ENCLOSURE CLASSIFICATION IP 65 (MÍN.) 8 CERTIFICATES (SEE GENER	7B-Z-0-2-40				
3 P&ID 4 PIPE LINE EQUIPMENT NUMBER 1"-SFIC-371002-SS10-P 5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION NO 7 ENCLOSURE CLASSIFICATION IP 65 (MÍN.) 8 CERTIFICATES 9	7B-Z-0-2-40				
4 PIPE LINE EQUIPMENT NUMBER 1"-SFIC-371002-SS10-P 5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION NC 7 ENCLOSURE CLASSIFICATION IP 65 (MÍN.) 8 CERTIFICATES 9					
5 EQUIPMENT MATERIAL / PIPE 6 AREA CLASSIFICATION 7 ENCLOSURE CLASSIFICATION 8 CERTIFICATES 9 (SEE GENERAL)	1"-SFIC-371002-SS10-PP -				
7 ENCLOSURE CLASSIFICATION IP 65 (MÍN.) 8 CERTIFICATES (SEE GENE) 9	316L SS				
7 ENCLOSURE CLASSIFICATION IP 65 (MÍN.) 8 CERTIFICATES (SEE GENE) 9	NOT CLASSIFIED				
8 CERTIFICATES (SEE GENER					
9	IP 65 (MÍN.) CONF. NBR IEC 60529 (SEE GENERAL NOTES 7 - PAGE 3)				
	(OLE GENERAL NOTES I TAGE S)				
I TYPE	ROPROCESSED				
	FULL				
11 MOUNTING					
	ALUMINUM				
	BY MANUFACTURER				
	IIO (COPPER FREE)				
15 POWER SUPPLY	24 Vcc - 2 WIRE				
16 OUTPUT SIGNAL 4 - 20 mA	4 - 20 mA (500 ohms @ 24 Vcc)				
15 POWER SUPPLY 24	HART				
같 18 PRECISION	±0,25% F.E				
19 REPEATABILITY BY N	BY MANUFACTURER				
20 CALIBRATION RANGE BY N	BY MANUFACTURER				
21 CALIBRATED RANGE	-				
22 ELECTRICAL CONNECTION	1/2" NPT (F)				
23 DJUSTABLE RANGE / AJ. LOCAL ZERO AND SPAN	YES / YES				
24 MOUNTING	FULL				
g 25 ELEMENT TYPE ELEMENT MATERIAL PT100Ω (3 Wire)	PLATINUM				
25 ELEMENT TYPE ELEMENT MATERIAL PT100Ω (3 Wire)	6 mm				
27 SENSOR CONNECTION TO WELL	1/2" NPT				
28 HEAD MATERIAL ELECTRICAL CONNECTION ALUMINUM	1/2" NPT (F)				
29 MOUNTING	- · · · · · · · · · · · · · · · · · · ·				
30 MATERIAL TYPE OF CONSTRUCTION SS1016L	CONICAL MACHINED FROM A BAR				
31 CONNECTION TO THE PROCESS ASTM A270 Gr.TP316L, SE	EAMLESS, TRI-CLAMP CONNECTION.				
32 FLANGE FACE FINISH	<u> </u>				
33 CONNECTION TO THERMOMETER	1/2" NPT(F)				
34 INSERTION LENGTH "U"	220 mm				
	BY MANUFACTURER				
36					
37					
38					
38 39	U				
38 39 40					
38 39 40 41	LIOLIID				
38 39 40 41 42 FLUID PHYSICAL STATE PRODUCT	LIQUID				
38 39 40 41 42 FLUID PHYSICAL STATE PRODUCT	20 °C				
38 39 40 41 42 FLUID PHYSICAL STATE PRODUCT	20 °C 4 bar-g				
38 39 40 41 42 FLUID PHYSICAL STATE PRODUCT	20 °C 4 bar-g - °C				
38 39 40 41 42 FLUID PHYSICAL STATE PRODUCT	20 °C 4 bar-g - °C Cp				
38 39 40 41 42 FLUID PHYSICAL STATE PRODUCT	20 °C 4 bar-g - °C Cp kg/m³				
38 39 40 41 42 FLUID PHYSICAL STATE PRODUCT	20 °C 4 bar-g - °C Cp kg/m³ -				
38 39 40 40 41 42 FLUID	20 °C 4 bar-g - °C Cp kg/m³				
38 39 40 40 41 42 FLUID PHYSICAL STATE PRODUCT 43 MINIMUM TEMPERATURE NORMAL MAXIMUM - °C 44 MINIMUM PRESSURE NORMAL MAXIMUM - bar-g 45 DESIGN PRESSURE DESIGN TEMPERATURE - bar-g 46 VISCOSITY @ OPERATING CONDITION - 47 DENSITY @ OPERATING CONDITION - 48 SUSPENDED SOLIDS (%) 49 50 50	20 °C 4 bar-g - °C Cp kg/m³ -				
38 39 40 40 41 42 FLUID PHYSICAL STATE PRODUCT 43 MINIMUM TEMPERATURE NORMAL MAXIMUM - °C 44 MINIMUM PRESSURE NORMAL MAXIMUM - bar-g 45 DESIGN PRESSURE DESIGN TEMPERATURE - bar-g 46 VISCOSITY @ OPERATING CONDITION - 48 SUSPENDED SOLIDS (%) 49 50 50	20 °C 4 bar-g - °C Cp kg/m³ -				









7B-TIT-371102

NUMBER: PRD-AIC-DSH-031 CLIENT NR: 569-DB7B-AIC-711-001

TITLE

INSTRUMENT TAG NUMBER

13 de 13

TEMPERATURE INDICATING TRANSMITTER-SANITARY

SERVICE HARVEST TANK N°1, TQ-5701 DILUTION (DO2) BUFFER 2 3 P&ID 7B-Z-0-2-40 4 PIPE LINE EQUIPMENT NUMBER 1"-SFIC-371102-SS10-PP EQUIPMENT MATERIAL / PIPE 316L SS AREA CLASSIFICATION NOT CLASSIFIED ENCLOSURE CLASSIFICATION IP 65 (MÍN.) CONF. NBR IEC 60529 **CERTIFICATES** (SEE GENERAL NOTES 7 - PAGE 3) TYPE MICROPROCESSED 10 MOUNTING FULL 11 **BODY MATERIAL** ALUMINUM BODY PRESSURE CLASS BY MANUFACTURER 13 ALUMINIO (COPPER FREE) METER CASING **TRANSMITTER** POWER SUPPLY 24 Vcc - 2 WIRE **OUTPUT SIGNAL** 4 - 20 mA (500 ohms @ 24 Vcc) 16 COMMUNICATION PROTOCOL HART 17 18 **PRECISION** ±0,25% F.E 19 REPEATABILITY BY MANUFACTURER CALIBRATION RANGE BY MANUFACTURER 20 CALIBRATED RANGE **ELECTRICAL CONNECTION** 1/2" NPT (F) 22 DJUSTABLE RANGE / AJ. LOCAL ZERO AND SPAN YES / YES 23 FULL MOUNTING 25 **ELEMENT TYPE** ELEMENT MATERIAL PT100Ω (3 Wire) PLATINUM ROD LENGTH (L) ROD DIAMETER BY MANUFACTURER 6 mm 26 SENSOR CONNECTION TO WELL 27 1/2" NPT HEAD MATERIAL **ELECTRICAL CONNECTION** ALUMINUM 1/2" NPT (F) MOUNTING 29 MATERIAL TYPE OF CONSTRUCTION CONICAL MACHINED FROM A BAR 30 SS1016L CONNECTION TO THE PROCESS ASTM A270 Gr.TP316L, SEAMLESS, TRI-CLAMP CONNECTION. 31 FLANGE FACE FINISH 32 CONNECTION TO THERMOMETER 33 1/2" NPT(F) INSERTION LENGTH "U" 220 mm 34 WELL EXTENSION LENGTH "T" BY MANUFACTURER 35 36 37 38

41						- 1			
42	FLUID	PHYSICAL STATE			PRODUCT		LIQUID		
43	MINIMUM TEMPERATURE	NORMAL		MAXIMUM	-	°C	20	℃	
44	MINIMUM PRESSURE	NORMAL		MAXIMUM	-	bar-g	4	bar-g	
45	DESIGN PRESSURE		DESIGN TEMPER	ATURE	-	bar-g	-	°C	
46	VISCOSITY @ OPERATING CONDITION			-		Ср			
47	DENSITY @ OPERATING CONDITION			-		kg/m³	kg/m³		
48	SUSPENDED SOLIDS (%)				-				
49					-				
50					-				
51	MANUFACTURER				Endress + Hauser (E+H) or Similar				
52	MODEL		-	-					
	42 43 44 45 46 47 48 49 50	42 FLUID 43 MINIMUM TEMPERATURE 44 MINIMUM PRESSURE 45 DESIGN PRESSURE 46 VISCOSITY @ OPERATING C 47 DENSITY @ OPERATING C 48 SUSPENDED SOLIDS (%) 49 50	42 FLUID PHY 43 MINIMUM TEMPERATURE NOF 44 MINIMUM PRESSURE NOF 45 DESIGN PRESSURE 46 VISCOSITY @ OPERATING COND 47 DENSITY @ OPERATING COND 48 SUSPENDED SOLIDS (%) 49 50 51 MANUFACTURER	42 FLUID PHYSICAL STATE 43 MINIMUM TEMPERATURE NORMAL 44 MINIMUM PRESSURE NORMAL 45 DESIGN PRESSURE DESIGN TEMPER 46 VISCOSITY @ OPERATING CONDITION 47 DENSITY @ OPERATING CONDITION 48 SUSPENDED SOLIDS (%) 49 50 51 MANUFACTURER	42 FLUID PHYSICAL STATE 43 MINIMUM TEMPERATURE NORMAL MAXIMUM 44 MINIMUM PRESSURE NORMAL MAXIMUM 45 DESIGN PRESSURE DESIGN TEMPERATURE 46 VISCOSITY @ OPERATING CONDITION 47 DENSITY @ OPERATING CONDITION 48 SUSPENDED SOLIDS (%) 49 50 51 MANUFACTURER	42 FLUID PHYSICAL STATE PRO 43 MINIMUM TEMPERATURE NORMAL MAXIMUM - 44 MINIMUM PRESSURE NORMAL MAXIMUM - 45 DESIGN PRESSURE DESIGN TEMPERATURE - 46 VISCOSITY @ OPERATING CONDITION 47 DENSITY @ OPERATING CONDITION 48 SUSPENDED SOLIDS (%) 49 50 51 MANUFACTURER	## PRODUCT ### PRODUCT ### PRODUCT ### PRODUCT ### MINIMUM TEMPERATURE NORMAL MAXIMUM - °C ### MINIMUM PRESSURE NORMAL MAXIMUM - bar-g ### DESIGN PRESSURE DESIGN TEMPERATURE - bar-g ### VISCOSITY @ OPERATING CONDITION - ### SUSPENDED SOLIDS (%) ### SUSPENDED SOLIDS (%) ### Endress + H	FLUID	