

Product name	VEGAFLEX 81
Model code	FX81.ACPAIFAXAMAM
eID	DE292449308
Quantity	1
	On request

TDR sensor for continuous level and interface measurement of liquids

Application area

The VEGAFLEX 81 level sensor measures maintenance-free all kind of liquids. Even in applications with vapour, buildup, foam generation and condensation, the sensor delivers precise and reliable measured values. The VEGAFLEX 81 is the economical solution for your level and interface measurement application.

Your benefit

- The guided adjustment enables a simple, time-saving and reliable setup
- Comprehensive diagnostic possibilities ensure a maintenance-free operation and hence a high plant availability
- Shortenable probes offer a simple standardisation and highest flexibility in the planning

Measuring unit for lengths		Metre / Millimetre
Scope	A	Europe
Approval	C	ATEX II 1G, II 1/2G, II 2G Ex ia IIC T6...T1 Ga, Ga/Gb, Gb
Version / Material	P	Coax (ø42.2mm) with multiple hole / 316L
Length (from seal surface)		782 mm
Process fitting / Material	AI	Flange NPS 4" Class 300 RF, ASME B16.5 / 316/316L
Seal / Second line of defense / Process temperature	F	FKM (SHS FPM 70C3 GLT) / without / -40...+150°C
Electronics	A	Two-wire 4 ... 20 mA/HART with SIL qualification
Supplementary electronics	X	without
Overvoltage protection of the supply cable		without
Housing / Protection	A	Aluminium single chamber / IP66/IP68 (0.2bar)
Cable entry / Connection	M	M20x1.5 / Cable gland PA black (ø5-9mm), standard
Display/Adjustment module PLICSCOM	A	mounted
Certificates	M	Yes
Additional cleaning procedures		without
Suitable for tropical regions		without
Foodstuff/Pharmaceutical certificate		without
Test certificate		Measuring accuracy (5 measuring points)
Certificate / Standard		(C) 3.1-Inspection certificate for material (EN 10204, NACE MR 0175 + MR 0103)
Dye penetration test		without
Pressure test		acc. to ASME B31.1/B31.3, incl. 3.1 Inspection certificate
Helium leak test		without
Radiographic test		with, incl. 3.1 Inspection certificate
PMI test		without
Low temperature test at -60 °C		without
Durability test more than 360 h		without
Welding documentation		yes, conform to Nace MR0103/MR0175, incl 2.2 manufacturer declaration

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Customer-specific production	No
Supply certificates	with goods and separately via courier
Operating instructions	EN - English
Number of operating instructions	1
Type label / Measurement loop identification label	of foil / without
Free services from VEGA	VEGAcare (24/7 service hotline*, personalised application advice and the myVEGA customer portal), VEGAsense (intuitive and easy operation, comprehensive diagnostic functions and digital test assistants)
Customer-specific adjustment	No
Linearization	No
Address setting	No
Application-specific settings	without
Min. process pressure in bar	-1
Max. process pressure in bar	40
Customs tariff number (HS code)	90261029
Software version	Current version

DIMENSIONAL DRAWING - ELECTRONIC LEVEL TRANSMITTER

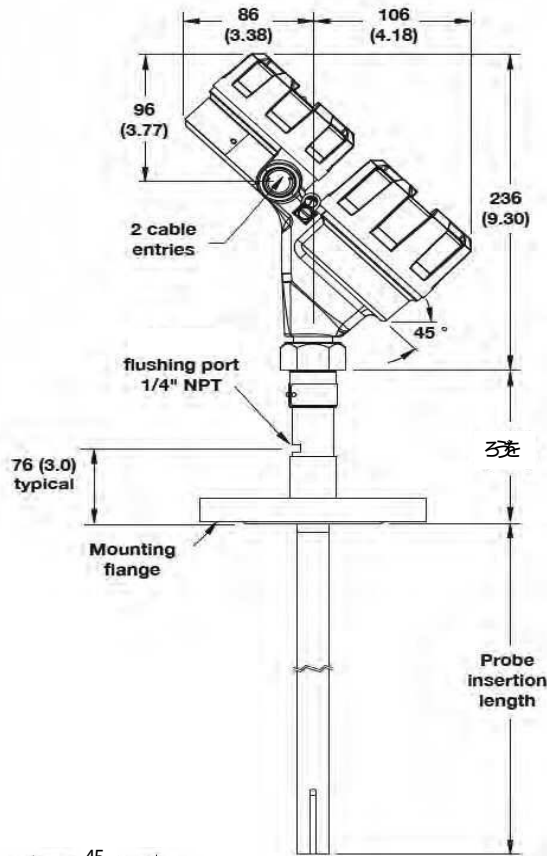
All dimensions are in mm (inches) unless otherwise specified - General tolerance ± 5 mm except as noted
Allow 200 mm overhead clearance for cover removal

CUSTOMER : FJORDS PROCESSING FRANCE SAS
CUST. REF. : 103000622 Revision: 0
ITEM : 4
MODEL : X 706-512A-A21 + X 7CT-64M0-A 10-10-079
TAG Né : LT-3002

OUR REF. : SM136721

QUANTITY : 1

FOR APPROVAL



Coaxial GWR Probe,
End View

TRANSMITTER / HOUSING

Type: Smart (Digital)
Output: 4 - 20 mA + HART
Display: Digital
Power supply: 24 V DC, Loop Powered
Approval:

ATEX II 1 G Ex ia IIC T4 Ga

Ingress protection: IP 67

Cable entry:

Dual M20 x 1.5 entries - one Exd nickel coated brass plugged

Housing material: 316 SST

Cable gland Exd nickel coated brass

BODY / SENSOR

Process connection:

4" 300 lbs ANSI RF: 125-250 AARH

Flange / probe material:

- Flange: A-182 Gr F316/316L

- A adaptor: 316/316L

- Others Wetted parts: 316/316L

Dimensions:

Probe insertion length (IL) = 782 mm

WET H2S SERVICE CONDITIONS

DESIGN

Pressure: 12/FV barg

Temperature: -26/149 $^{\circ}$ C

OPERATING

Pressure: 10.50 barg

Temperature: 115 - 135 $^{\circ}$ C

Dielectric constant: 1.4 - 100

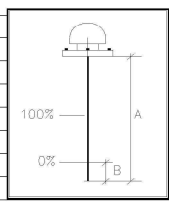
Maximum viscosity: 2000 cP (mPa.s)

REMARKS

NACE construction MR-01-75
ASME B31.3 design
Material certificate EN 10204-3.1
100 % dye penetrant test on pressure boundary welds
Hydrostatic test at 74.46 bar during 10 minutes
Paint offshore

01	14/06/2021	TONY MBUMBA
REV.	DATE	CERTIFIED BY
DOC. REF.:	D136721-04	

 **Magnetrol®**

1	GENERAL DATA	TAG No	QUANTITY	LT-3002	1	
2		PID No	0335-TITA-R-DP-000-2150			
3		SERVICE	DESALTER VESSEL			
4		EQUIPMENT No	F-2150			
5		PIPING CLASS	Note (0)	NA		
6		AREA CLASSIFICATION	ATEX Directive 2014/34/EU: Zone 1 IIA T3			
7		CORROSIVE COMPOUNDS	H2S			
8		FUNCTION	INTERFACE LEVEL - GAS DETECTION - SAFETY			
9	SERVICE CONDITIONS	UNIT	MINI	NORMAL	MAXI	
10		UPPER MEDIUM	GAS			
11		LOWER MEDIUM	CRUDE			
12		OPERATING PRESSURE	Bar g	11,30		
13		DESIGN PRESSURE	Bar g	12.5 / FV		
14		OPERATING TEMPERATURE	°C	115-145		
15		DESIGN TEMPERATURE	°C	-26/160		
16		UPPER CONDUCTIVITY	µS/cm	N/A		
17		LOWER CONDUCTIVITY	µS/cm	3-4		
18		DENSITY @ P,T UPPER	kg/m3	5-10		
19	DENSITY @ P,T LOWER	kg/m3	831			
20	BODY AND SENSING ELEMENT	TYPE :	RADAR - NOTE 5			
21		STYLE:	GUIDED WAVE (TDR TECHNOLOGY)			
22		MOUNTING : INTERNAL / EXTERNAL	INTERNAL (TOP OF VESSEL)			
23		MONTING: VERTICAL / HORIZONTAL	VERTICAL			
24		INSTRUMENT CONNECTION SIZE & RATING	4" 300# RF			
25		CHAMBER CONNECTION SIZE & RATING	NA			
26		FLANGE FACING	RF SMOOTH FINISH			
27		CONNECTION LOCATION	TOP OF VESSEL			
28		QUANTITY OF PROBE	1			
29		PROBE LENGTH "A" (see sketch)	mm	782		
30	SCALE LENGTH 0-100% (see sketch)	mm	0-100%			
31	PLUG LENGTH "B" (see sketch)	mm	TBA BY VENDOR			
32	CHAMBER Diameter	NA				
33	MATERIALS	CHAMBER	NA			
34		CONNECTING FLANGE	316L SS			
35		PROBE	316L SS - COAXIAL TYPE			
36		ENCLOSURE TUBE	NA			
37		GASKET	VITON GFLT			
38		BOLTING	NA			
39	MATERIAL ACCORDING TO NACE MR0175	YES				
40	TRANSMITTER HOUSING	316 SS				
41	ELECTRONICS	ELECTRONIC : REMOTE / HEAD	HEAD			
42		TYPE	HART 7 PROTOCOL			
43		ELECTRICAL OUTPUT	4-20 mA			
44		TRANSMITTER MOUNTING	DIRECT			
45		POWER SUPPLY	2 WIRE - 24 VDC (Loop Powered)			
46		INGRESS PROTECTION	IP 65			
47		CERTIFICATION CODE	Ex ia IIA T3 AS A MINIMUM			
48		LCD DISPLAY	YES			
49		CABLE GLAND	NA			
50		ELECTRICAL CONNECTION	ISO M20x1.5 MM			
51	REMOTE DISPLAY HOUSING	NA				
52	SIL REQUIREMENT	SIL 2				
53	ACCURACY	+/- 1.0% OF INSTRUMENT RANGE				
54	MISCELLANEOUS	FIELDBUS Devices	NA			
55		Quiescent Current Draw	NA			
56		POLARITY SENSITIV	NA			
57		LAS CAPABILITY	NA			
58		NAMEPLATE	REQUIRED - NOTE 3			
59		BULT-IN INDICATOR	YES			
60		INDICATOR SCALE	0 - 100%			
61	FACTORY TEST	REQUIRED				
62	SUNSHADE	NA				
63	MANUFACTURER	MODEL	TBA BY VENDOR	TBA BY VENDOR		
64	NOTES:					
65	1/ ALL LEVEL INSTRUMENTS SHALL BE COMPLIANT TO:					
66	0335-TITA-I-SP-000-001: INSTRUMENT GENERAL SPECIFICATION					
67	0335-TITA-I-SP-000-002: INSTRUMENT DESIGN SPECIFICATION					
68	0335-TITA-I-SP-000-003: INSTRUMENT REQUIREMENTS FOR PACKAGES					
69	0335-TITA-R-DC-000-001: BASIC ENGINEERING DESIGN DATA					
70	0335-TITA-P-SP-000-001: PIPING MATERIAL CLASSES					
71	TBA: TO BE ADVISED					
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