

# SPECIFICATIE TEHNICA/DATA SHEET

## SEMNALIZATOR DE NIVEL CU FURCA VIBRATOARE

## VIBRATING FORK LEVEL SWITCHES

02	Reemis pentru executie	21.12.2022	Trifan O.	Dobleaga S.	Danilov B	
01	Emis pentru executie	14.12.2021	Trifan O.	Mircia R.	Danilov B	
00	Emis pentru comentarii	02.12.2021	Trifan O.	Mircia R.	Danilov B	
Rev/ Rev.	Denumireamodificarii/Change description	Data/Date	Pr Spec / Consultant	Verificat/Checked	Aprobat / Approved	
ROENGG CONSULTING RO 24611389 / 0344 806 979 / contact@roengg.com Ploiesti		Nr. proiect / Project no.		Nr. desen / Drawing no.		Rev/Rev
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Scara/Scale		Denumire document/Document name				
-		SpecificatieTehnica – Intrerupator de nivel				
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#### GENERAL/GENERALITIES

1.	Simbol instrument/ Tag number	LSHH-201	LSLL-202	
2.	Numar P&ID /P&ID number	SP-13-201	SP-13-201	
3.	Tag linie/echipament/ Line/equipment number	Rezervor apa PSI	Rezervor apa PSI	
4.	Destinatie/Service	Detectie nivel maxim-maximorum	Detectie nivel minim-minimorum	
5.	Clasificare zona pericol/Hazardous area clasification	N/A	N/A	

#### PARAMETRI PROCES/PROCESS CONDITION

6.	Fluid/Fluid	Apa incendiu	Apa incendiu	
7.	Compusi corozivi/ Corrosive compounds	N/A	N/A	
8.	Operating pressure barg	Min. Normal Max.	ATM	
9.	Operating temp °C	Min. Normal Max.	AMB	
10.	Temperatura ambientala /Ambient temp °C	-29 °C ÷ +40 °C	-29 °C ÷ +40 °C	
11.	Fluid partea superioara/Upper fluid	Fluid partea inferioara/Lower fluid	Aer Apa	Air Apa
12.	Densitate partea superioara/Upper SG @ T	Densitate partea inferioara/Lower SG @ T	- 1000kg/m <sup>3</sup>	1000kg/m <sup>3</sup>

#### APARAT/ELEMENT

13.	Tip/Type	Furca vib/Vibrating fork	Furca vib/Vibrating fork	
14.	Lungime furca vibratoare /Fork length	VTA (note 4,8)	VTA (note 4,8)	
15.	Setpoint	hold	hold	
16.	Racord proces/Process connection	Flansa/Flanged	Flansa/Flanged	
17.	Tip etansare/Flange style	B1	B1	
18.	DN/PN racord proces/ Process conn. size and rating	DN 50/PN16	DN 50/PN16	
19.	Material flansa/Flange material	AISI 316 SST	AISI 316 SST	
20.	Material parti in contact cu fluidul /Wetted material	AISI 316 SST	AISI 316 SST	
21.	Material carcasa/Enclosure material	Epoxy coated aluminium	Epoxy coated aluminium	
22.	Material etansare/Seal/O Ring material	VTA	VTA	
23.	Diametru intern vas/Vessel I.D.	ID=10 000 mm	ID=10 000 mm	
24.	Lungime stut racord/Nozzle length	150 mm	150mm	
25.	Grosime perete rezervor/ Wall thickness	HOLD mm	HOLD mm	

#### CONTACT/SWITCH

26.	Alimentare/ Power supply	230 V	230 V	
27.	Deadband	Fix/Fixed	Fix/Fixed	
28.	Numar contacte/Contacts quantity	N/A	N/A	
29.	Tip contacte/iesiri/Contacts arrangement/output	Digital	Digital	
30.	Contacts DC rating	N/A	N/A	
31.	Contacts AC rating	N/A	N/A	
32.	Afisaj/Integral indicator	N/A	N/A	
33.	Material corp/ body material	316 SST	316 SST	
34.	Material etansare/o-ring/ Seal/ O-Ring material	VTA	VTA	
35.	Presetupa/ Cable gland	M20x1.5 note 9	M20x1.5 note 9	
36.	Protectie IP/ Ingress protection	IP 65	IP 65	
37.	Categorie ATEX/EPL/ ATEX/EPL Category	N/A	N/A	
38.	Tip protectie/Type of protection	N/A	N/A	

#### ALTELE/OTHERS

39.	Protectie intemperii/Winterization	Note 5	Note 5	
40.	Parasolar/Sunshade	Note 5	Note 5	
41.				
42.				
43.				
44.				
45.				
46.				

**Note:**

1. Lista compusi corozivi:

2. Furnizorul va asigura: Manual de instalare, operare si mentenanta in romana si engleza, Specificatie tehnica, Certificat ATEX, placuta inox cu simbolul instrumentului si care va cuprinde minim: Tag. Nr./Dimensiune/PN/Material/Producator/Model nr./Certificat ATEX nr, etc.

3. Furnizorul va recomanda piesele de schimb necesare pentru functionarea optima a echipamentelor si va oferi informatii privind service-ul autorizat.

4. Furnizorul va confirma lungimea de insertie pentru optima performanta a instrumentului.

5. Producatorul va confirma ca instrumentele sunt evaluate pentru a rezista conditiilor ambientale de mediu si luminii directe a soarelui. Parasolarul va fi prevazut la recomandarea producatorului.

6. Instrumentele vor fi marcate CE

7. Documente de insotire a instrumentelor:

- Declaration of Conformity in accordance with European Directive ATEX 2014/34/EU (Equipment and Protective Systems for use in Potentially Explosive Atmospheres);

- Declaration of Conformity in accordance with European Directive (EMC) 2014/30/EU (Electromagnetic Compatibility of Equipment);

- Traceability Certificate for Materials as per EN 10204 -3.1 and PED Certification

- Calibration Certificate;

- Functional Tests Certificates

- Hydrostatic Test Certificate;

- Weld Examination Inspection Certificate(if applicable).

8. Semnalizatorul de nivel va fi procurat numai dupa verificarea compatibilitatii cu desenul de executie al vasului.

9. Instrumentul va fi echipat cu o presetupa de cablu adecvată pentru tipul de protecție selectat.

10. Aceasta specificatie tehnica are rol informativ, nu este intocmita pentru procurare si se va verifica la faza de detaliu de executie. Semnalizatorul de nivel se va procura numai dupa verificarea compatibilitatii cu executia vasului.

VTA- Data ce va fi furnizata/confirmata de vanzator.

**Notes:**

1. List of corrosive compounds:

2. Manufacturer shall provide: Installation, operating and maintenance manual in Romanian and English, catalogues and technical data sheet, ATEX Certificate, SS tag plate engraved with the following information as minimum: Tag no./ Size/ Rating/ Material/ Manufacturer/ Model no./ ATEX, etc.

3. The supplier will recommend the spare parts required for the optimum equipment operation and will provide information about the authorized service.

4. The supplier shall confirm the insertion length for the optimal performance of instrument.

5. Manufacturer shall confirm that the instruments are rated to withstand the environmental conditions and direct sunlight; sunshade shall be provided if manufacturer recommend it.

6. Instruments shall be CE marking

7. Examinations, Inspections and Testing Certificates shall be performed in accordance with:

- Declaration of Conformity in accordance with European Directive ATEX 2014/34/EU (Equipment and Protective Systems for use in Potentially Explosive Atmospheres);

- Declaration of Conformity in accordance with European Directive (EMC) 2014/30/EU (Electromagnetic Compatibility of Equipment);

- Traceability Certificate for Materials as per EN 10204 -3.1 and PED Certification

- Calibration Certificate;

- Functional Tests Certificates

- Hydrostatic Test Certificate;

- Weld Examination Inspection Certificate.

8. The level switch shall be purchased only after compatibility check with vessel execution drawing.

9. Instrument shall be provided with cable gland suitable for mentioned type of protection and necessary plugs.

10. This data sheet shall be used for inquiry only, not for purchasing and shall be verified during detail phase. The level transmitter shall be purchased only after compatibility check with vessel execution.

VTA-Data to be provided/confirmed by Vendor.

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