

**PROIECTARE REZERVOR PENTRU APA P.S.I. SI PROIECTARE INEL
DE RACIRE LA REZERVORUL R1 PENTRU TITEI****DEPOZIT TAMPON INDEPENDENTA****SPECIFICATIE TEHNICA / DATA SHEET****SEMNALIZATOR DE NIVEL CU FURCA VIBRATOARE****VIBRATING FORK LEVEL SWITCHES****INSTRUMENTATIE (ICS)**

| | | | | | |
|---|--|---------------------------|-------------------------|---------------------|--------------------|
| 02 | | | | | |
| 01 | | | | | |
| 00 | Emis pentru comentarii | 09.09.2022 | O.T. | R.M. | S.D. |
| Rev. / Rev. | Denumirea modificarii / Change description | Data / Date | Pr Spec / Consultant | Verificat / Checked | Aprobat / Approved |
| ROENGG CONSULTING RO 24611389 / 0344 806 979 / contact@roengg.com Ploiesti | S.C. CONPET S.A. Strada Anul 1848 nr 1-3, cod postal 100559, Ploiesti, Prahova, ROMANIA | Nr. proiect / Project no. | Nr. desen / Drawing no. | | Rev. / Rev. |
| | | 10532021 | RNG-DTDS-ICS-DTS-002 | | 00 |
| Faza / Phase | Denumire document / Document name | | | | |
| DTDS | Specificatie Tehnica – Intrerupator de nivel | | | | |
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GENERAL/GENERALITIES

| | | | | |
|----|---|------------------------------------|------------------------------------|--|
| 1. | Simbol instrument/ Tag number | LSHH-101 | LSLL-102 | |
| 2. | Numar P&ID /P&ID number | RNG-DTDS-PIP-PLT-002 | RNG-DTDS-PIP-PLT-002 | |
| 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. |
| 9. | Operating temp °C | Min. | Normal | Max. |
| 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 |
| 12. | Densitate partea superioara/Upper SG @ T | Densitate partea inferioara/Lower SG @ T | - | 1000kg/m ³ |

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 | TBD, ON/OFF | TBD, ON/OFF | |
| 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=10000 mm | ID=10000 mm | |
| 24. | Lungime stut racord/Nozzle length | 150 mm hold | 150mm hold | |
| 25. | Grosime perete rezervor/ Wall thickness | HOLD mm | HOLD mm | |

CONTACT/SWITCH

| | | | | |
|-----|---|-------------------|-------------------|--|
| 26. | Alimentare/ Power supply | 24 V dc | 24 V dc | |
| 27. | Deadband | Fix/Fixed | Fix/Fixed | |
| 28. | Numar contacte/Contacts quantity | N/A | N/A | |
| 29. | Tip contacte/iesiri/Contacts arrangement/output | Namur | Namur | |
| 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. | | | | |

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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