

## Buoyancy/Displacer Level Questionnaire

Please answer the following questions and return to [fielddevices-support@schneider-electric.com](mailto:fielddevices-support@schneider-electric.com) – thank you!

1. What type of measurement is being made? (check one)
  - Level If level, what is the liquid density? \_\_\_\_\_ kg/m<sup>3</sup>
  - Interface If interface, what are the 2 liquid densities? \_\_\_\_\_ kg/m<sup>3</sup> & \_\_\_\_\_ kg/m<sup>3</sup>
  - Density If density, what is the liquid density range? \_\_\_\_\_ to \_\_\_\_\_ kg/m<sup>3</sup>
  
2. What is the process temperature? \_\_\_\_\_
  
3. What is the ambient temperature? \_\_\_\_\_
  
4. What is the process pressure? \_\_\_\_\_
  
5. What process wetted material is required? (check one)
  - Carbon Steel
  - 316 SS
  - Hastelloy C276
  - Inconel
  - Other \_\_\_\_\_
  
6. What size **transmitter** connection flange is required? (check one)
  - 2 inch
  - 3 inch
  - 4 inch
  - DN50
  - DN70
  - DN 80
  - DN 100
  
7. What is the required pressure rating of the transmitter flange? (check one)
  - ANSI 150
  - ANSI 300
  - ANSI 600
  - ANSI 900
  - ANSI 1500
  - PN16
  - PN40
  - PN63
  - PN100
  - PN160
  - PN250
  - PN400
  
8. What type of flange contact face is required? (check one)
  - RF
  - SF
  - RJF/RTJ
  - B1/B1
  - B2/B2
  - D/C
  - D/D
  - F/F
  - F/E
  - L/L
  - Other \_\_\_\_\_
  
9. What size conduit opening is required? (check one)
  - ½-14 NPT
  - M20 x 1.5
  - None – Pneumatic
  - Other \_\_\_\_\_
  
10. What communication protocol is required? (check one)
  - HART with 4-20 mA
  - Profibus PA (special request only)
  - Foundation Fieldbus
  - Pneumatic 3-15 PSI
  
11. What certification is required? (check one)
  - ATEX Intrinsically Safe
  - ATEX Explosionproof
  - EAC Intrinsically Safe
  - EAC Explosionproof
  - NEPSI Intrinsically Safe
  - NEPSI Explosionproof
  - INMETRO Intrinsically Safe
  - INMETRO Explosionproof
  - None - Pneumatic
  - Other \_\_\_\_\_
  
12. Is a heating jacket required? (Yes or No)
  - YES If Yes proceed to question 13
  - NO If No process to question 14

13. What size flange connection is required for the heating jacket?

B1 / DN15 PN40     B1 / DN25 PN40     B2 / DN15 PN40     B2 / DN25 PN40  
 ½" ANSI 300 RF     1" ANSI 300 RF     ½" ANSI 300 RJF     1" ANSI 300 RJF

14. Is a displacer element required? (Yes or No)

YES (If yes proceed to question 15)  
 NO (If no, proceed to question 17)

15. What is the required displacer material? (check one)

316 SS     Hastelloy C276     Inconel     Monel     Titanium     PTFE

16. What is the required displacer length? (Available lengths are 12" – 591" [300 – 15000 mm])

Length = \_\_\_\_\_

17. Is a displacer chamber required? (Yes of No)

YES (If yes proceed to question 18)  
 NO (If no proceed to question 24 )

18. What mounting type of vessel connections are required? (check one)

Side – Side     Side-Bottom     Side-Top     Top-Bottom

19. What is the required measurement length? (Available lengths are 12" – 236" [300mm – 6000mm])

Length = \_\_\_\_\_

20. What is the required chamber material? (check one)

Carbon Steel     316 SS     Hastelloy C276     Inconel     Other \_\_\_\_\_

21. What size are the flange connections to the vessel? (check one)

½"     1"     1 ½"     2"     DN15     DN25     DN40     DN50

22. What is the flange contact face? (check one)

RF     RJF/RTJ     E     F     LM     LF     LT     LG     ST     SG     B1  
 B2     C     D     LL

23. What type of drain is required on the chamber? (check one)

No Drain     ½" Flange     ¾" Flange     1" Flange     1 ½" Flange     2" Flange  
 ¾" NPTF     DN15 Flange     DN20 Flange     DN25 Flange     DN40 Flange  
 DN50 Flange     G ¾ Female Thread

24. Are any other remarks, options or features required? Please list below. Are any other remarks, options or features required? Please list below.

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**Sketch:****References:**

Product Specifications: 244LD Intelligent Buoyancy Transmitter for Level, Interface and Density with Torque Tube and Displacer, HART and Foundation Fieldbus	<a href="https://www.schneider-electric.com/en/download/document/FD-PSS-L-01-EN/">https://www.schneider-electric.com/en/download/document/FD-PSS-L-01-EN/</a>
Product Specifications: 167LP Pneum. Buoyancy Transmitter with Torque Tube for Liquid Level, Interface and Density	<a href="https://www.schneider-electric.com/en/download/document/FD-PSS-L-04-EN/">https://www.schneider-electric.com/en/download/document/FD-PSS-L-04-EN/</a>
Master Instruction: 244LD Intelligent Buoyancy Transmitter for Vers. 6.2.x Level, Interface and Density with Torque Tube and displacer – HART and Foundation Fieldbus	<a href="https://www.schneider-electric.com/en/download/document/FD-MI-L-004-EN/">https://www.schneider-electric.com/en/download/document/FD-MI-L-004-EN/</a>
Master Instruction: 167LP Pneum. Buoyancy Transmitter with Torque Tube for Liquid Level, Interface and Density	<a href="https://www.schneider-electric.com/en/download/document/FD-MI-L-002-EN/">https://www.schneider-electric.com/en/download/document/FD-MI-L-002-EN/</a>
Data Sheet: Foxboro® 244LD LevelStar High performance level transmitter	<a href="https://www.schneider-electric.com/en/download/document/FD-DS-L-003/">https://www.schneider-electric.com/en/download/document/FD-DS-L-003/</a>
204xx Accessories for Buoyancy Transmitters	<a href="https://www.schneider-electric.com/en/download/document/FD-PSS-L-05-EN/">https://www.schneider-electric.com/en/download/document/FD-PSS-L-05-EN/</a>
244LD Levelstar & 204xx Accessories Mounting Diagram	<a href="https://www.schneider-electric.com/en/download/document/FD-TL-L-009/">https://www.schneider-electric.com/en/download/document/FD-TL-L-009/</a>
Foxboro® Field Devices Capability Brochure	<a href="https://www.schneider-electric.us/en/download/document/FD-BR-006/">https://www.schneider-electric.us/en/download/document/FD-BR-006/</a>
Foxboro® Instrument Catalog	<a href="https://www.schneider-electric.com/en/download/document/FD-CT-001/">https://www.schneider-electric.com/en/download/document/FD-CT-001/</a>