



## Sensor de nível 2..2 / 2..3

Este sensor de nível com sinal de saída analógico está disponível até 2500 mm e cabeçote giratório de 360 ° que oferece flexibilidade durante sua montagem e operação.

O sensor de nível modelo 2..2 / 2..3 oferece opcionalmente um display em LCD ou controle remoto para parametrização do sensor

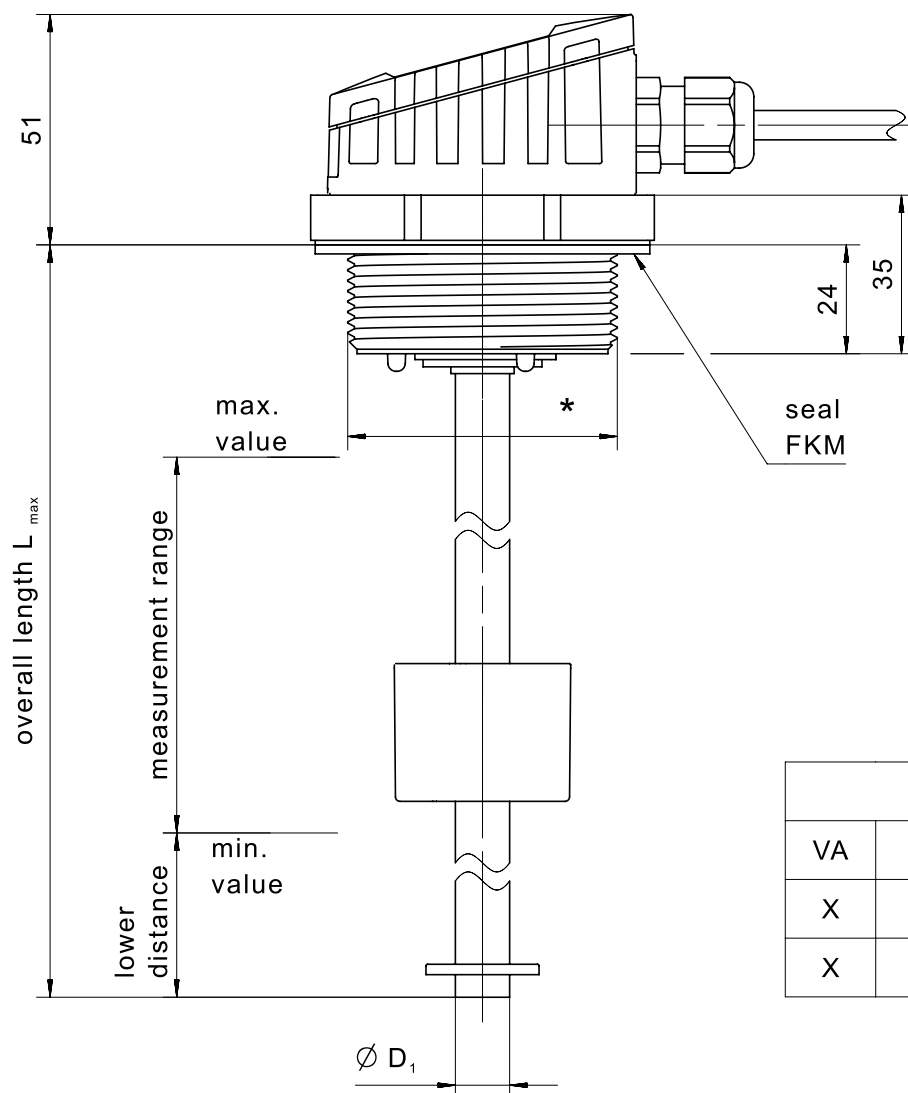
O cliente ainda pode optar por diferentes materiais, comprimento de medição e resolução do sensor, podendo desta forma ser usado em uma infinidade de aplicações industriais e móbil.

### Especificação Técnica

- Tecnologia de sensores magnético (reed switch)
- Roscas: G 1.5 , G 2 1.5 NPT ou 2 NPT
- Range de medição até 2500 mm
- Materiais: PVC, PP, PA 12, aço inox ou PVDF
- Sinal de saída em tensão ou corrente
- Até 4 sinais de saída digital programáveis
- Resolução de medição 10-35 mm (padrão 10 mm / 20 mm)
- Temperatura de trabalho -40 °C até +85 °C
- Sensor de temperatura opcional

## Desenho técnico

IMAGE 1/6



| tube |                   |            | head *                 |
|------|-------------------|------------|------------------------|
| VA   | $D_1 \varnothing$ | $L_{\max}$ |                        |
| X    | 12                | 1500       | G2 or G1 $\frac{1}{2}$ |
| X    | 16                | 2500       | G2 or G1 $\frac{1}{2}$ |

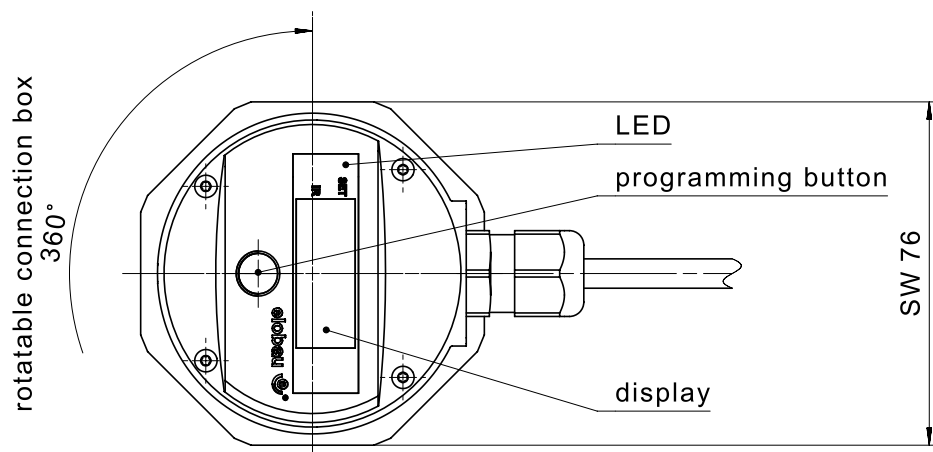


IMAGE 2/6

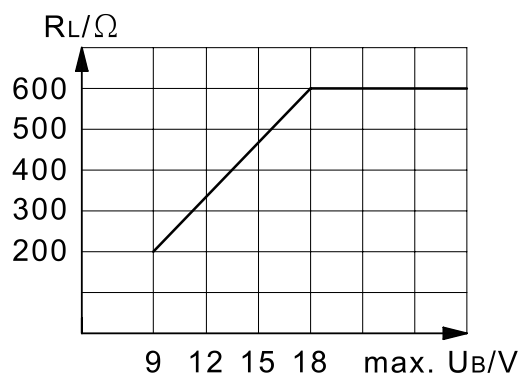
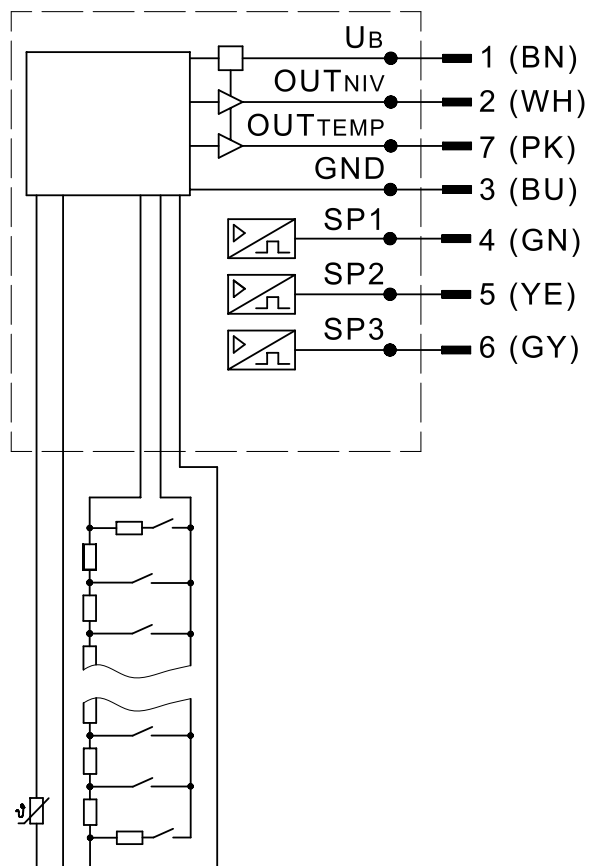


IMAGE 3/6

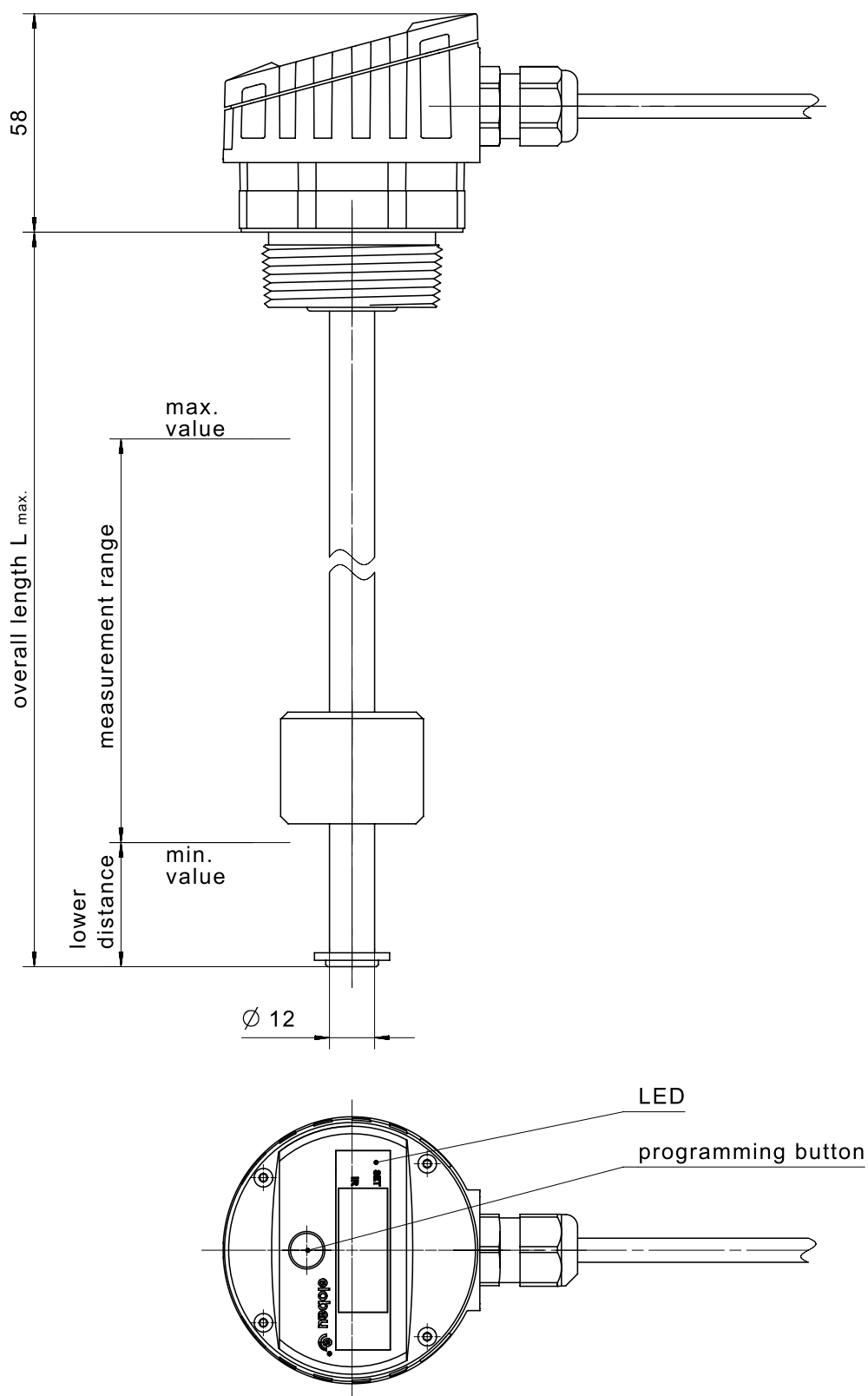
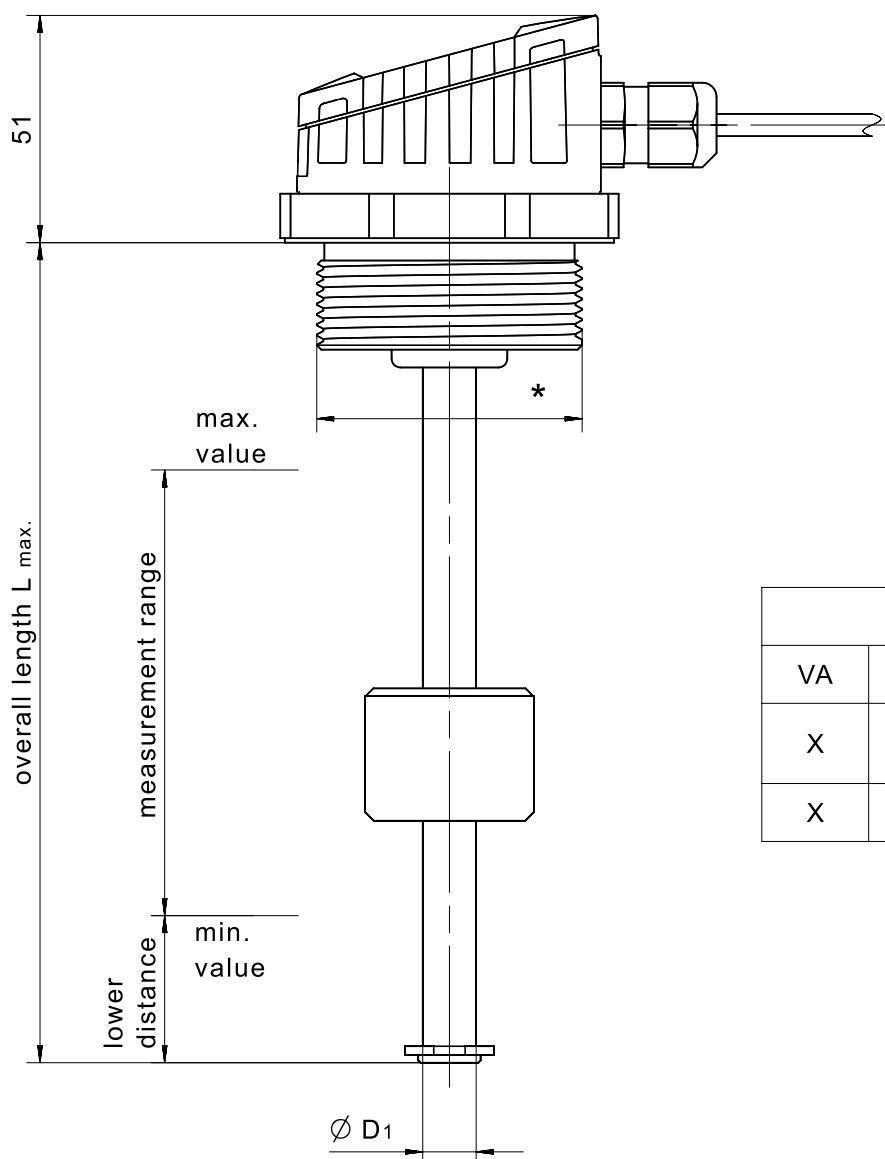


IMAGE 4/6



| tube |                   |       | head *   |
|------|-------------------|-------|--|
| VA   | $\varnothing D_1$ | L max |  |
| X    | 12                | 1500  | G2 or G1 $\frac{1}{2}$<br>NPT2 or NPT1 $\frac{1}{2}$ |
| X    | 16                | 2500  | G2 or NPT2   |

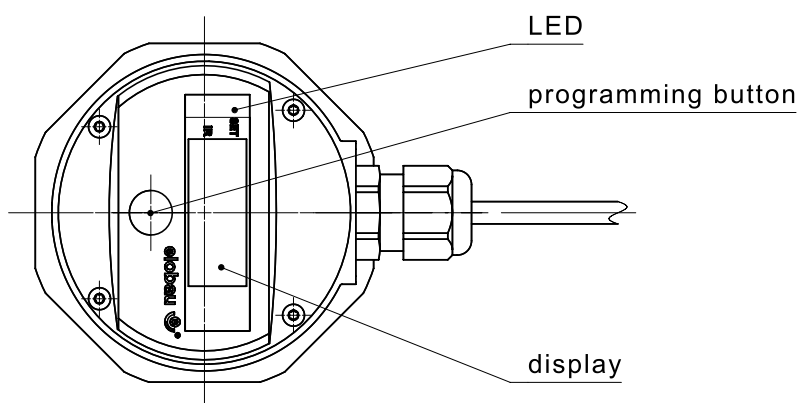
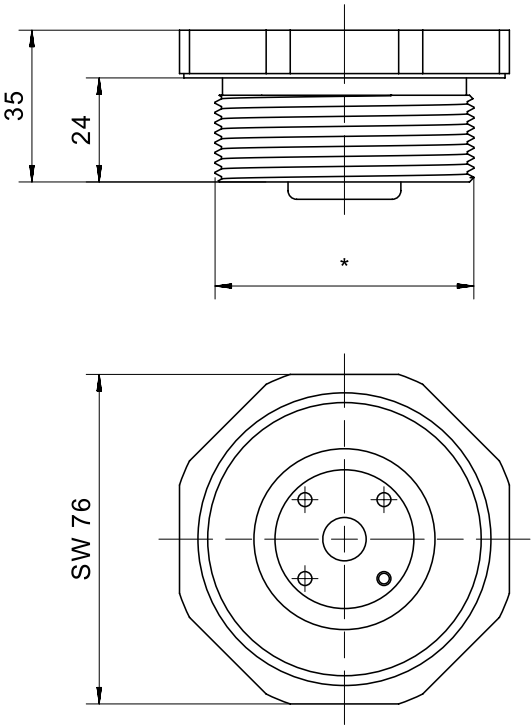
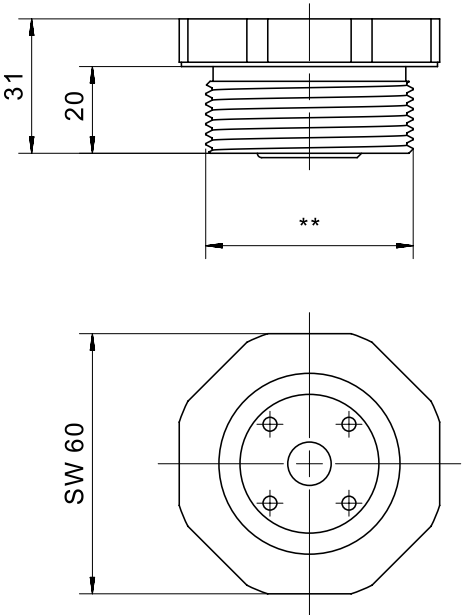


IMAGE 5/6



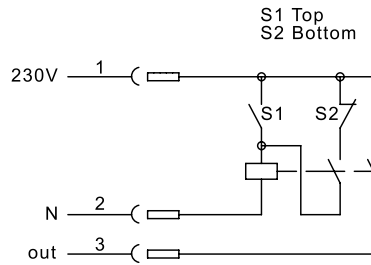
| for<br>Ø 16 tube | for<br>Ø 12 tube | head thread * |      | material |      |    |
|------------------|------------------|---------------|------|----------|------|----|
|                  |                  | G2            | NPT2 | PVC      | PVDF | PP |
|                  | x                |               | x    | x        | x    | x  |
|                  | x                | x             |      | x        | x    |    |
| x                |                  | x             | x    | x        |      |    |



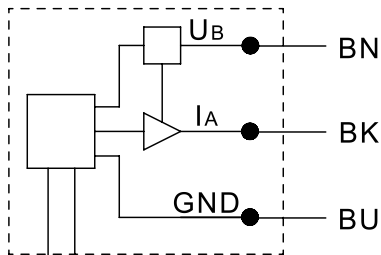
| for<br>Ø 12 tube | head thread ** |          | material |      |    |
|------------------|----------------|----------|----------|------|----|
|                  | G1 1/2         | NPT1 1/2 | PVC      | PVDF | PP |
| x                | x              |          | x        | x    |    |
| x                |                | x        | x        | x    | x  |

IMAGE 6/6

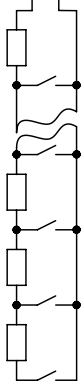
## 222313-001



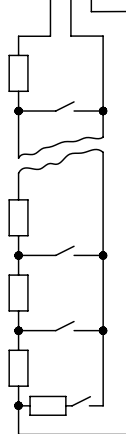
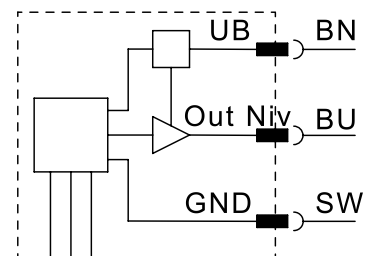
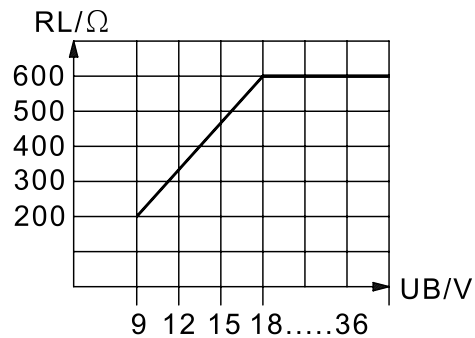
## 205322-003



## 225312-001



maximale Last am Stromausgang  
maximum load on current output



## Product options

IMAGE 1/1

### ORDERING KEY

| Article number      | Spacing | Thread  | Riser length | Measuring length | Lower blind zone |
|---------------------|---------|---------|--------------|------------------|------------------|
| <b>212232-001/B</b> | 10      | G 2     | 400          | 320              | 33               |
| <b>212232-002/B</b> | 20      | G 2     | 600          | 500              | 43               |
| <b>212232-003/B</b> | 20      | G 2     | 800          | 700              | 43               |
| <b>212232-004/B</b> | 20      | G 2     | 1000         | 900              | 43               |
| <b>212232-005/B</b> | 20      | G 2     | 1200         | 1100             | 43               |
| <b>215232-001/B</b> | 10      | G 1 1/2 | 400          | 320              | 33               |
| <b>215232-002/B</b> | 20      | G 1 1/2 | 600          | 500              | 43               |
| <b>215232-003/B</b> | 20      | G 1 1/2 | 800          | 700              | 43               |
| <b>215232-004/B</b> | 20      | G 1 1/2 | 1000         | 900              | 43               |
| <b>215232-005/B</b> | 20      | G 1 1/2 | 1200         | 1100             | 43               |

Technical properties: riser material stainless steel 1.4571, housing material PA12, float material PA12, FKM seal, display, 3 configurable switching points, temperature contact, 3m pigtail outlet with 8-pin M12 connector, rotatable head, output signal 4...20mA



## Características do artigo

| Attribute                                 | 212232....             | 215232.... | ED212232.... | ED215232.... |
|---|------------------------|------------|--------------|--------------|
| Min. switching voltage                    | 9 V DC                 |            | -            |              |
| Max. switching voltage                    | 32 V DC                |            | -            |              |
| Max. switching current                    | 0.5 A                  |            | -            |              |
| Polarity reversal protection              | yes                    |            | -            |              |
| Switching output                          | low-side (open drain)  |            | -            |              |
| Output signal min.                        | 4 mA                   |            | -            |              |
| Output signal max.                        | 20 mA                  |            | -            |              |
| EMC immunity (Norm)                       | DIN EN IEC 61000-6-2   |            | -            |              |
| EMC emission (Norm)                       | DIN EN 55011           |            | -            |              |
| Operating voltage min.                    | 9 V DC                 |            | -            |              |
| Operating voltage max.                    | 32 V DC                |            | -            |              |
| Current consumption                       | 68 mA                  |            | -            |              |
| Linearity error                           | 2 %                    |            | -            |              |
| Technology                                | Reed                   |            | -            |              |
| Outputs                                   | analog + digital       |            | -            |              |
| Number of switching outputs               | 3                      |            | -            |              |
| Temperature output                        | yes                    |            | -            |              |
| Lower blind zone                          | siehe Bestellschlüssel |            | -            |              |
| Spacing                                   | siehe Bestellschlüssel |            | -            |              |
| Application area                          | Industry               |            | -            |              |
| Rotatable head                            | yes                    |            | -            |              |
| Recommended minimum density of the medium | 0.65 g/cm³             |            | -            |              |
| Float diameter                            | 39 mm                  |            | -            |              |
| Housing material                          | PA12                   |            | -            |              |
| Float material                            | PA12                   |            | -            |              |
| Riser material                            | VA 1.4571              |            | -            |              |
| Cable material                            | PVC                    |            | -            |              |
| Sealing material                          | FKM (Viton)            |            | -            |              |
| Protection class, mechanical              | IP67 DIN EN 60529      |            | -            |              |
| Operating temperature min.                | -20 °C                 |            | -            |              |
| Max. operating temperature                | 70 °C                  |            | -            |              |
| Min. storage temperature                  | -30 °C                 |            | -            |              |

| Attribute                        | 212232....                         | 215232.... | ED212232.... | ED215232.... |
|----------------------------------|------------------------------------|------------|--------------|--------------|
| Max. storage temperature         | 80 °C                              |            | -            |              |
| Vibration resistance (Norm)      | DIN EN 60068-2-6 DIN EN 60068-2-64 |            | -            |              |
| Pressure resistance              | 3 bar                              |            | -            |              |
| ESD insulation resistance (Norm) | DIN EN 61000-4-2                   |            | -            |              |
| Mounting type                    | Thread                             |            | -            |              |
| Thread                           | G 2                                | G 1 1/2    | -            |              |
| Riser diameter                   | 12 mm                              |            | -            |              |
| Installation opening             | G 2                                | G 1 1/2    | -            |              |
| Torque                           | 40 N m                             |            | -            |              |
| Connector type                   | M12                                |            | -            |              |
| Cable length                     | 3 m                                |            | -            |              |