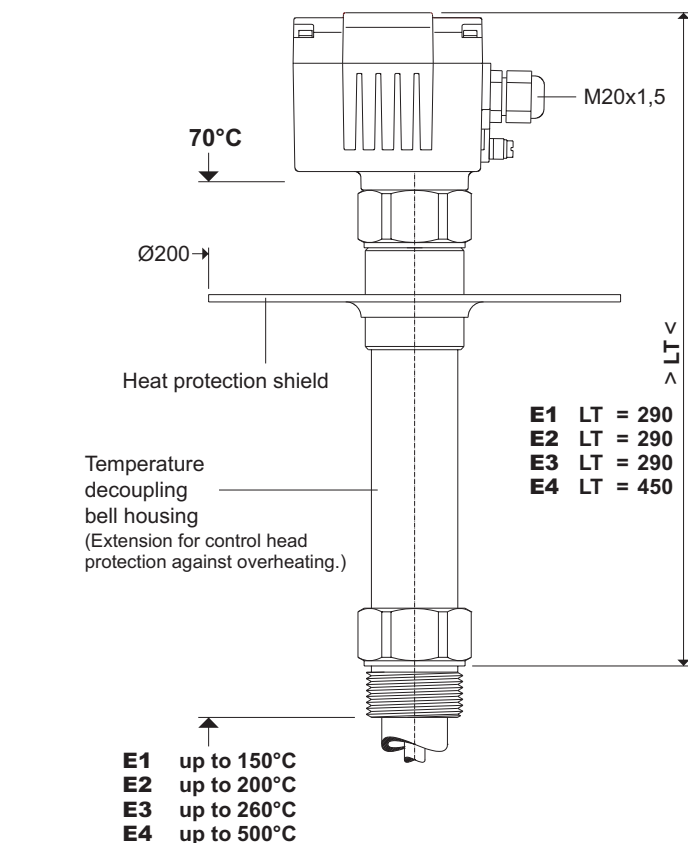
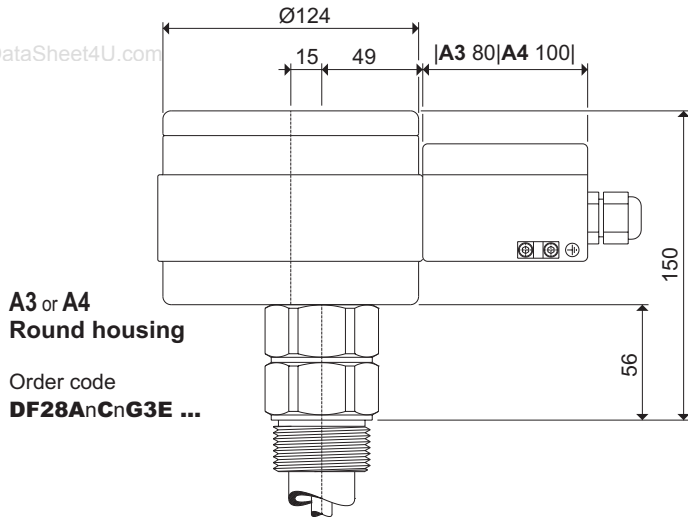
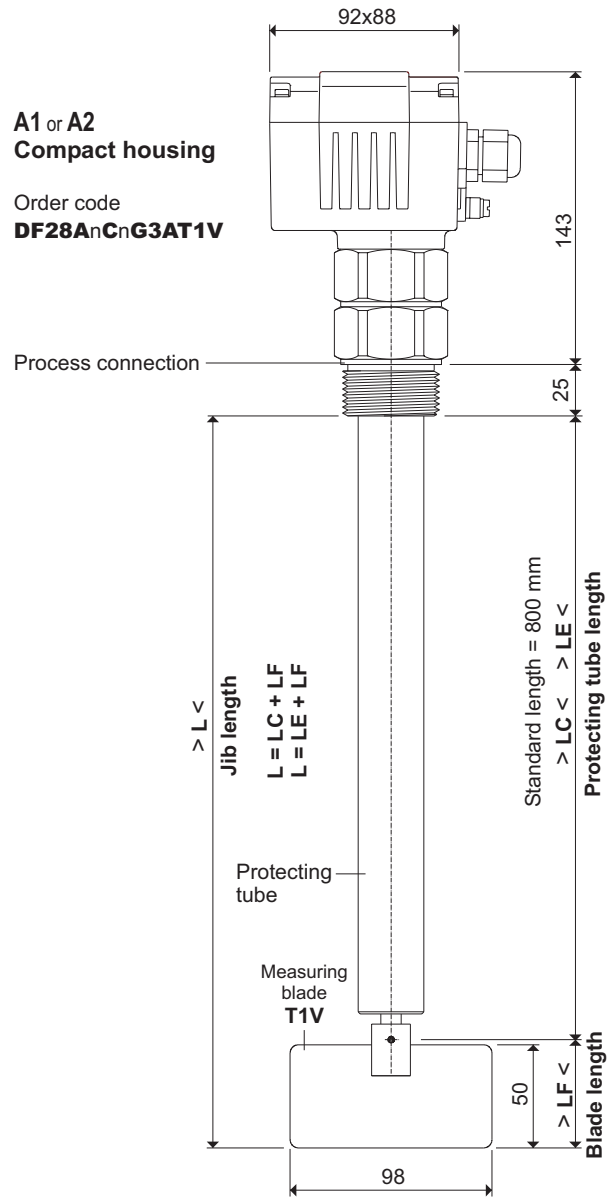


**Full, empty and demand indicator**  
with protecting tube for vertical mounting  
with KD for any mounting position  
(with bearing and seal ring at the end of the tube)

**Signal contact** 2 A / 250V AC potential-free  
**Type of protection** IP66 in accordance with DIN EN 60529  
**Maintenance** none



**A1 or A2**  
**Compact housing**  
Order code  
**DF28AnCnG3AT1V**



You will find further technical details  
under appliance information **DF-GI..**

# Rotary blade level indicators

Level limit switches for bulk goods

# DF28

4 housing versions to choice

### Choice of options

#### Certifications, certificates, approvals

- B0** Standard and ATEX II 3/3D T80°C IP66 **Dust**.....
- B1** ATEX Ⓢ II 1/2D T80°C IP66 **Dust** .....
- B2** ATEX Ⓢ II 1D T70°C IP66 **Dust** <sup>D2)</sup>.....
- B3** ATEX Ⓢ II 1/3D T80°C IP66 **Dust**.....
- B9** Further approvals ..... on request

#### Supply voltage

- C1** 220...240V AC (50...60Hz).....
- C2** 110...120V AC (50...60Hz).....
- C3** 48V AC (50...60Hz).....
- C4** 24V AC (50...60Hz).....
- C5** 24V DC.....
- C9** Special voltages ..... on request

#### Self-monitoring

- D0** Without monitoring
- D1** Function monitoring .....
- D2** Voltage monitoring .....

#### Signal lamps<sup>1)</sup>

- H0** Standard = with function LEDs .....
- H1** Collar for function LEDs .....
- H2** Signal lamp, LED green .....
- H8** Large signal lamp, LED green.....

#### Bulk goods temperature

- E0** Standard = -25°C...+80°C <sup>2)</sup>.....
- E1** -25°C...+150°C .....
- E2** -25°C...+200°C .....
- E3** -25°C...+260°C .....
- E4** -25°C...+500°C <sup>1)</sup>.....
- E7** Appliance heating 2,5 Watt <sup>1)</sup> ...
- E9** ...+1000°C <sup>1)</sup>..... on request

#### Container pressure

- P0** Standard = -0,5...5 bar <sup>3)</sup> .
- P1** -0.5 bar...10 bar .....
- P2** -0.1 bar...10 bar <sup>4)</sup> .....
- P5** -0.9 bar...1 bar <sup>4)</sup> .....
- P6** -0.9 bar...10 bar .....
- P7** -0.9 bar...10 bar <sup>4)</sup> .....

#### Process connection

- G2** Thread **G1¼"** DIN/ISO 228..... **X** **X**
- G3** Thread **G1½"** DIN/ISO 228..... **X** **X**
- G9** Other threads ..... on request
- F1** Flange **F70** Ø110, 4xØ9/Ø90..... **X** **X**
- F2** Flange **F100** 150x150, 4xØ18/Ø170..... **X** **X**
- F5** Flange DN32 PN 10..... **X** **X**
- F6** Flange DN100 PN 6..... **X** **X**

#### Material of process connection

- A** Aluminium.....
- E** Stainless steel .....
- X** Other materials ..... on request

#### Measuring blade

- M0** Without measuring blade .....
- S2** Socket blade 120x30 inclined.... **X** **X**
- M2** Socket blade 90x40 .....
- T0** Blade T220 68x220 .....
- T1** Blade T50 98x50 .....
- T2** Blade T100 98x100 .....
- T5** Blade T250 250x100 .....
- TG** Blade GT 98x8 .....
- T8** Rubber blade<sup>1)</sup> 250x98 .....
- X1** Blade X50 98x50 .....
- X2** Blade X100 98x100 .....
- X3** Blade X200 180x100 .....
- K1** Hinged blade T230 200x30 .....
- M9** Other measuring blades.... on request

#### Blade reinforcement

- Without reinforcement.....
- V** With reinforcement.....

#### Jib length and material, standard length LE or LC = 800 mm

- LE** Protecting tube in stainless steel.....
- 0 0 0 0** enter required length in mm, last digit always 0
- min. 250 mm, max. 6000 mm

**KD** with bearing and seal ring at the end of the protecting tube .....

Housing selection

- A1** Compact aluminium housing .....
- A2** Stainless steel compact housing .....
- A3** Aluminium round housing .....
- A4** Stainless steel round housing .....

Standard and ATEX Dust

- Standard and ATEX Dust .....
- Standard and ATEX Dust .....
- ATEX Ⓢ II 1D2G2GD EEx de IIB T6 T70°C IP66 **Gas+Dust** .....
- ATEX Ⓢ II 1D2G2GD EEx de IIB T6 T70°C IP66 **Gas+Dust** .....

### Supplies

- DF-SH** Weather protection hood in PVC, RAL 7001 ....  
Certificated only for zone 22 and in non-hazardous areas
- DF-SM2** Hexagonal nut **G1¼"**.....
- DF-SM3** Hexagonal nut **G1½"**.....

#### Material of nuts

- A** Aluminium
- E** Stainless steel

- DF-KV1** Second cable union for standard version .....
- DF-KV2** Second cable union for ATEX version .....

- <sup>D2)</sup> delivery only together with **D2** or **D1**
- <sup>1)</sup> **not** available together with **B1**, **B2**, **A3** and **A4**
- <sup>2)</sup> max. bulk goods temperature at **B2** = -20°C...+45°C
- <sup>3)</sup> container pressure at **B1**, **B2** and **B3** = -0.08bar...+0.08bar (-80...+80mbar)
- <sup>4)</sup> with pressure decoupling bell housing **DF-P2**, **-P5** and **-P7**
- !!!** usage for differences in pressure with **B1**, **B3**, **A3** and **A4** **!!!**

**CE** All devices are certified.

**B0**, **D0**, **H0**, **E0**, **P0**, **R0** and **M0** are **not needed** for order code

- Standard with**
- R0** NBR sealing ring, black .....
- suitable for the majority of bulk goods
- Options** only for special applications:
- R1** Sealing ring in Viton/Teflon/VA ..
- R2** Sealing ring in NBR, white FDA ...
- R5** Sealing ring in Teflon .....
- R9** Other sealing rings ...on request
- Rn** add as suffix to selected connection e.g. **G3ER2**

- Measuring blade passes through tight hole of:**
- G2**, **G3** .....
- and all other flanges
- G3** .....
- and all other flanges
- F1**, **F2**, **F6**, **F7** .....
- only for vertical mounting
- F2**, **F6**, **F7**
- F2**, **F6**, **F7**
- F2**, **F6**, **F7**
- F2**, **F6**, **F7**
- F2**, **F6**, **F7**
- F2**, **F6**, **F7**
- G2**, **G3** .....
- and all other flanges

All larger dimensioned blades **cannot** be inserted through the tight holes and must be mounted from the inside.

DF28 ..... Order code