Rotary blade level indicator

DF

MOLLET
Füllstandtechnik

Rotary blade level indicator

MOLLET-DF-series

The maintenance free level limit switches in the **DF** series can be used as **full, empty and demand indicator** and they guarantee an absolute reliability and safe function even under extreme and the most difficult conditions.

They are observing the filling level in silos, containers, weighers, discharge pipes etc. and they are excellently qualified for use in dusty, powdery and granulated bulk materials as well as in sludges and pastes.

They are versatile and universal usable because of their wide range of type varities, their plenty of accessories and their extensive ATEX certifications.
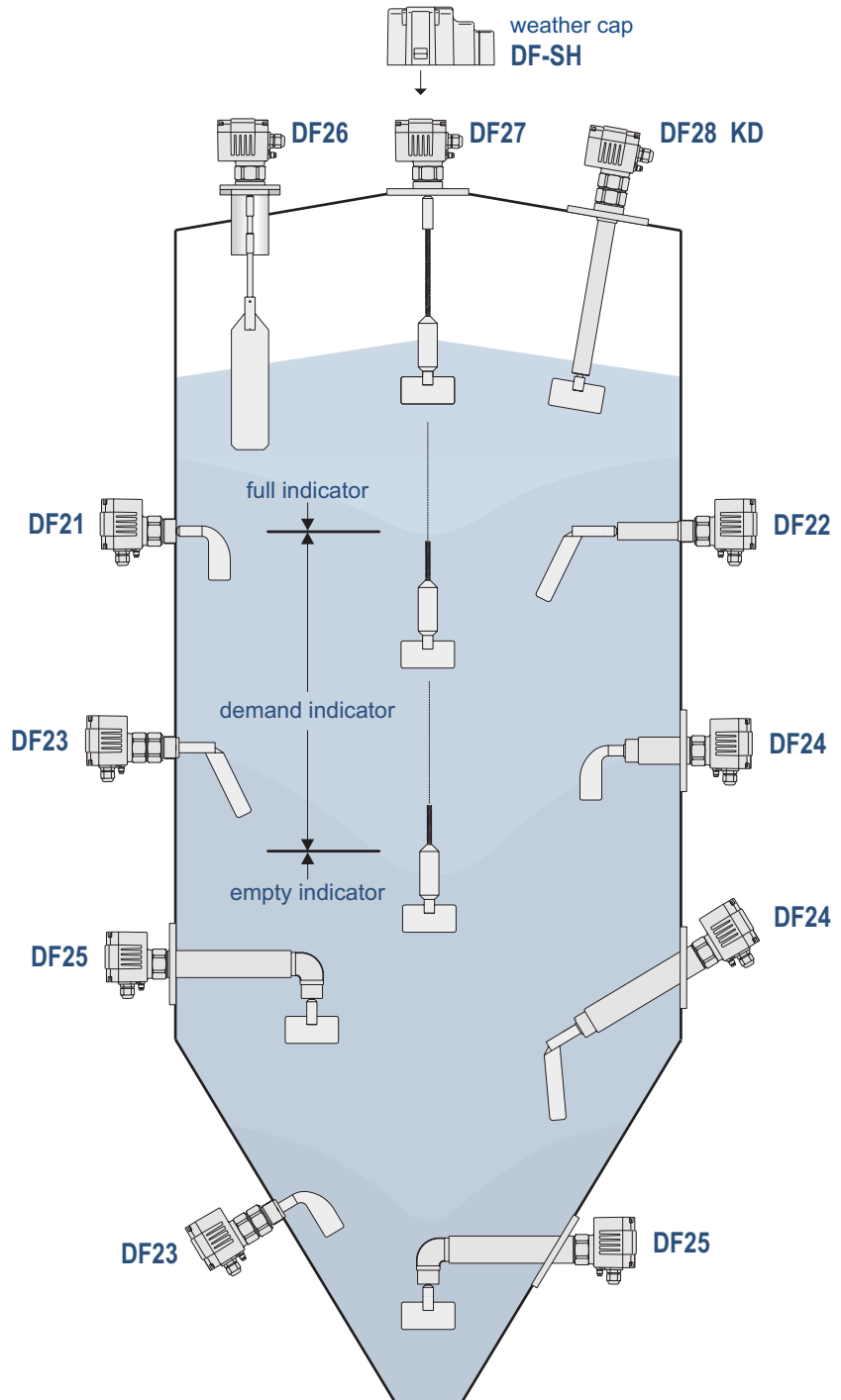
Simple and low-cost mounting.

Reliable function even by dust accumulation, adherence of bulk goods, electrostatic charge, temperature and pressure.

The **DF** rotary blade level indicators are certificated for use in all potentially explosive dust and gas atmospheres as well as in hybride mixtures.

weather cap
DF-SH

DF26   **DF27**   **DF28 KD**

DF21   full indicator   **DF22**

DF23   demand indicator   **DF24**

empty indicator   **DF24**

DF25

DF23   **DF25**

ATEX-Options

Ex types of protection

⬡ II 1D Ex ta IIIC T70°C

⬡ II 1/2D Ex ta/tb IIIC T80°C

⬡ II 1/3D Ex ta/tc IIIB T80°C

⬡ II 2G Ex db eb IIC T6

⬡ II 1G c IIC TX/II 2G Ex db eb IIC T6

Rotary blade level indicator

Shaft and protecting tube (jib)	stainless steel 304, optional 316Ti (rope shaft 316)
Measuring blade	stainless steel 304, optional 316Ti
Supply voltages	220 ... 240 V, 110 ... 120 V, 48 V, 24 V AC 12 V, 24 V and 48 V DC
Signal contact, potentialfree as standard	1 mA 4 V up to 2 A 240 V AC gold contacts
Ambient temperature	-20 °C ≤ Ta ≤ +70 °C optional -35 °C or -40 °C
Bulk temperature	-40 °C ≤ Ta ≤ +800 °C up to +1000 °C on demand
Process pressure	▸ -0,9 bar ... 10 bar ▸ -0,9 bar ... 10 bar with pressure decoupling bell housing for ATEX areas ▸ -0,9 bar ... 25 bar with area separating element (absolutely tight)
Type of protection	IP66
Process connections ▸ thread ▸ flange ▸ quick couplings	aluminium, stainless steel 304 or 316Ti G¾, G1, G1¼, G1½, G2, M30, M32 F70, F100, DN32, DN100 various types
Sensitivity	adjustable, depending on the bulk goods characteristics
Self-monitoring (option)	▸ function control ▸ function control with pulsating „all-right-signal" ▸ voltage monitoring
Shaft bearing	encapsulated ball bearing, optional of stainless steel
Shaft sealing	additional shaft sealing ring chooseable of NBR, NBR white (FDA conform), PTFE or special sealing ring PTFE/VITON

DF21

▸ wide range of application
▸ for any mounting position

DF22

▸ with extended process connection
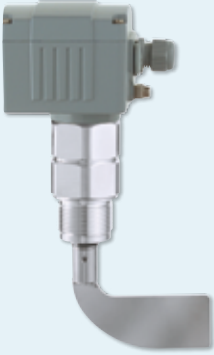▸ wide range of application
▸ for any mounting position

▸ with vibration dampening

Rotary blade level indicator

DF23
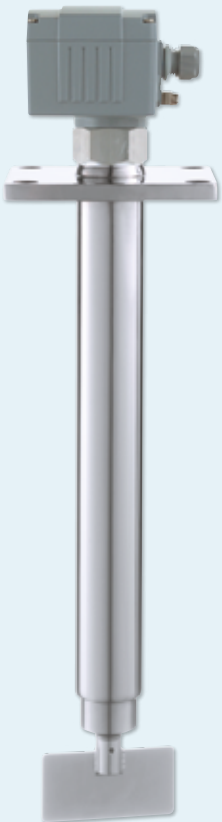
▸ with reinforced blade shaft
▸ for any mounting position

DF25

▸ with angled jib
▸ for horizontal mounting position

DF24

▸ reinforced blade shaft with long jib
▸ for any mounting position

DF26

▸ Pendulum shaft up to 1.5 m length
▸ for vertical mounting position

DF27

▸ Rope shaft up to 10 m length
▸ for vertical mounting position

Rotary blade level indicator

DF28

▸ with protecting tube up to 6 m length
▸ for vertical mounting position
▸ with built-in-bearing "KD" for any mounting position

▸ with level adjustment, for pressure-tight and dust proof use or for use without pressure and dust

DF29

▸ with protecting cage up to 6 m length
▸ for vertical mounting position

DF30

▸ for installation in the taper closure of bellow feeders

DF31

▸ with angular rotating measuring blade
▸ for any mounting position

DF33

▸ with angular rotating measuring blade
▸ for any mounting position

Rotary blade level indicator
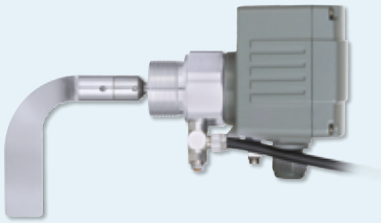
▸ Temperature decoupling bell housing

▸ Pressure decoupling bell housing for container pressure -0,9 bar … 10 bar

▸ Area separating element gas and dust proof up to 25 bar

▸ Overpressure enclosure und annular gap flushing

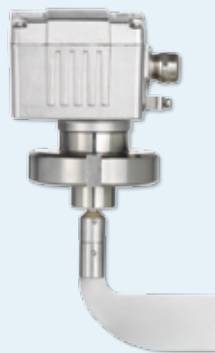▸ Zone separating element – separates Zone 0 from Zone 1

.. Quick couplings ....

▸ "Storz"-coupling

▸ KAMLOK-coupling

▸ Food industry-coupling

▸ Clamp coupling

Rotary blade level indicator

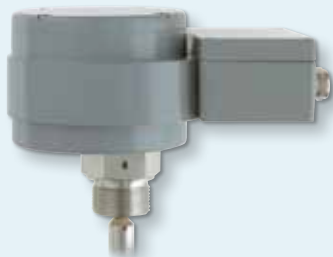**Four housings are available**

- ▸ **A1** aluminium pressure casting, RAL 7001 coated standard design, type of protection: IP66

- ▸ **A2** housing in stainless steel 316Ti hygienic type, type of protection: IP66

- ▸ **A3** EEx housing in aluminium type of protection: IP66

- ▸ **A4** EEx housing in stainless steel 316Ti hygienic type, type of protection: IP66

for housing A1 and A2

- ▸ with function display (on, full, empty, malfunction)

- ▸ with signal lamp (full or empty)

- ▸ with large signal lamp (full or empty)