

Rotary blade level indicators

Level limit switches for bulk goods

DF

Examples of application

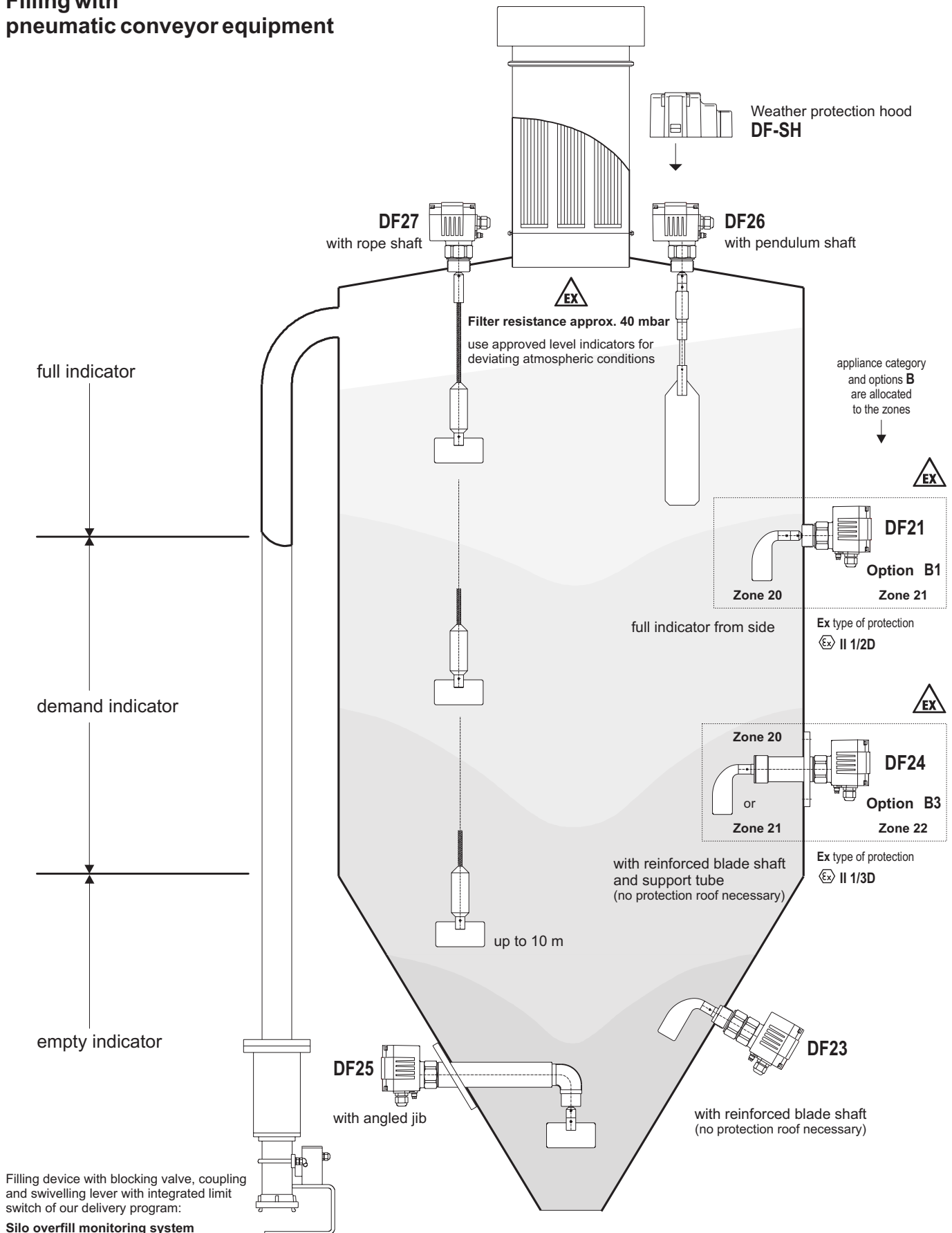
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Competence in rotation

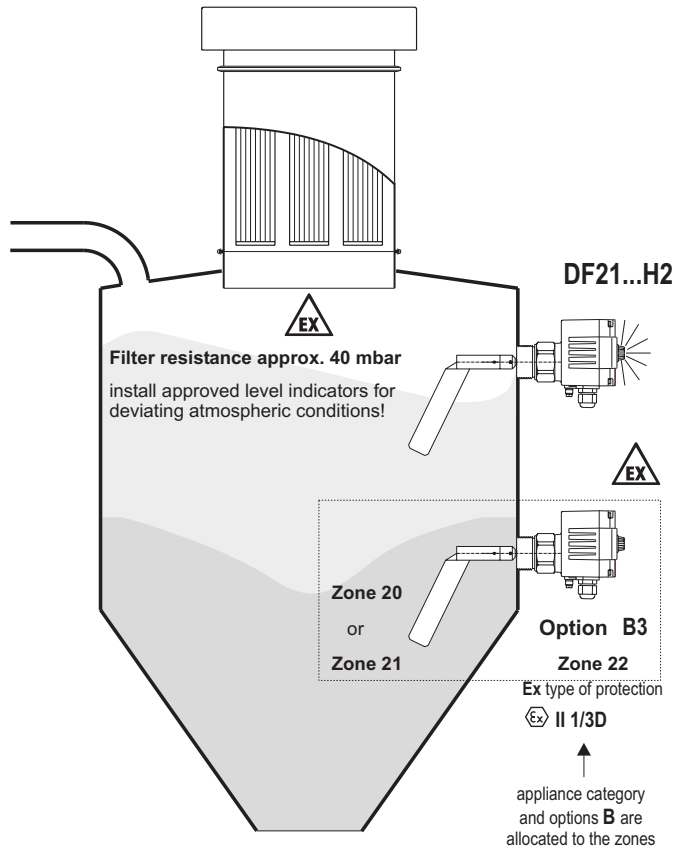
Silo

Filling with pneumatic conveyor equipment

Filling with pneumatic conveyor equipment



Storage bin, daily service container Full- and demand indicator with signal lamp



Optical display of the filling levels



Signal lamp, green
Option H2



Signal lamps
approved for zone 22



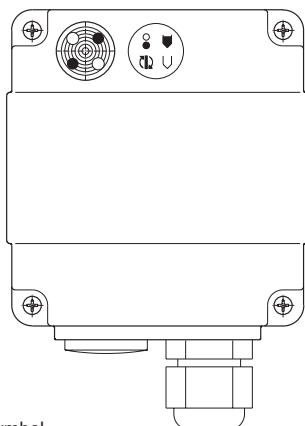
Carried out with longlife supra light LEDs.

Simply calibrating of the display function "full" / "empty"
due to changing of a jumper.

Function LEDs with collar

Collar for function LEDs
Option H1

Collars
approved for zone 22



Position of the function LEDs

LED, yellow
indicator on
"voltage existing"

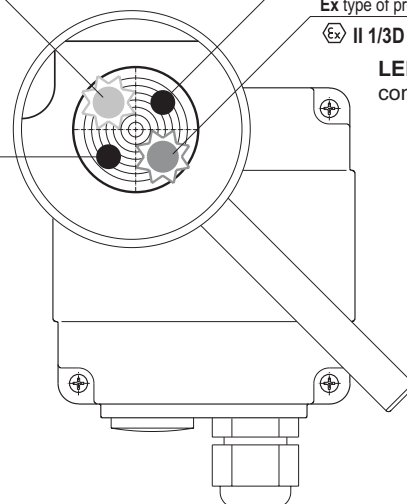
LED, red
"malfunction"

Option D1

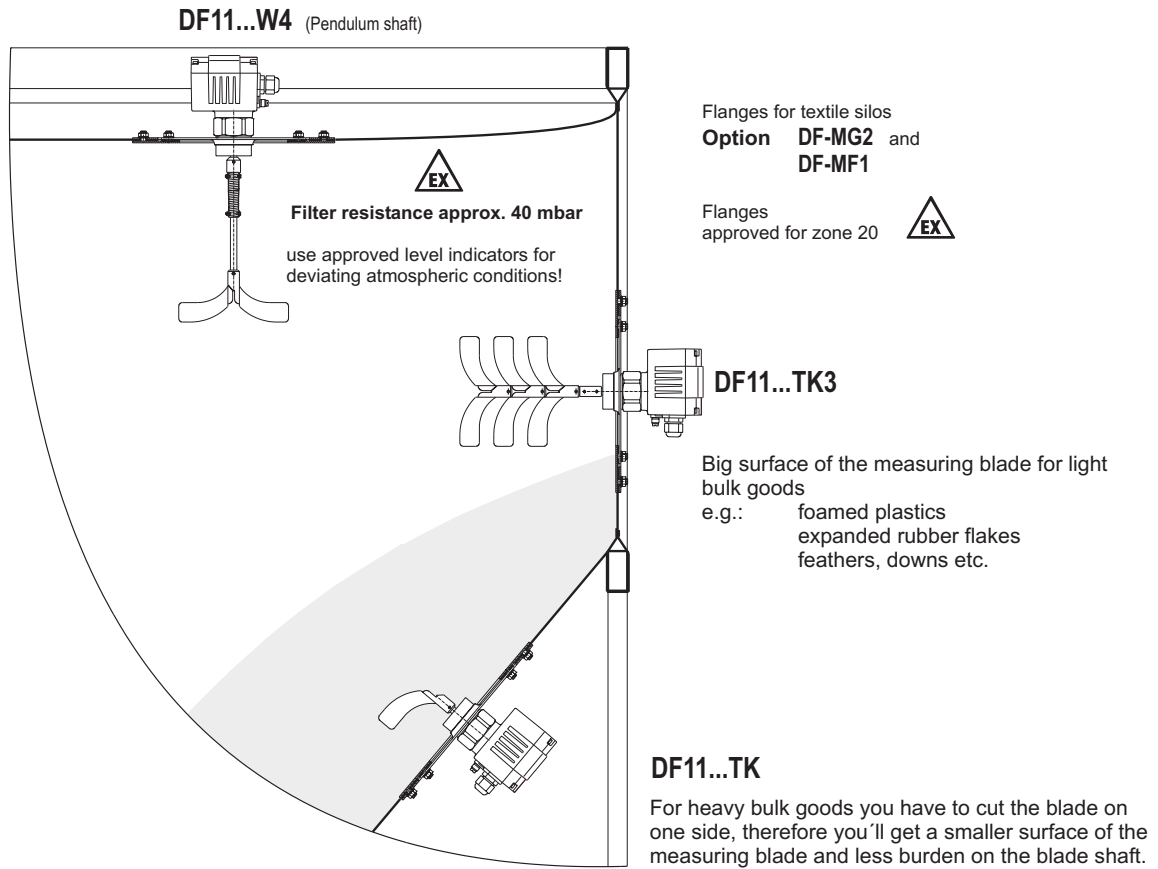
LED, green above
container "full"

Ex type of protection
Ex II 1/3D

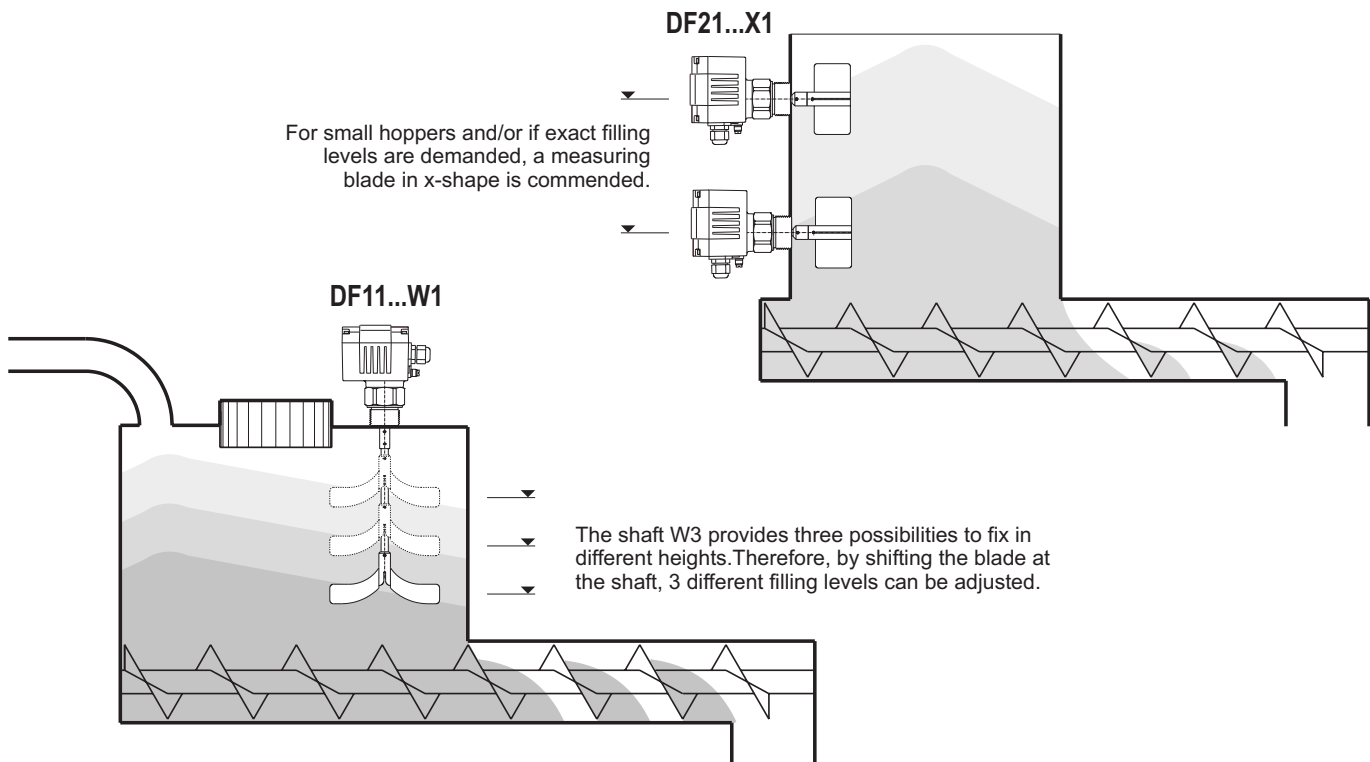
LED, green bottom
container "empty"



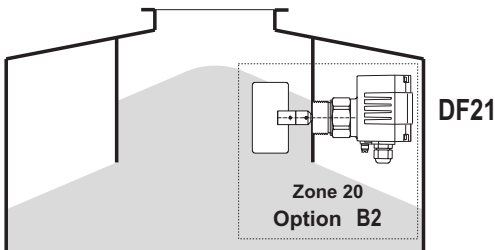
Textile silo



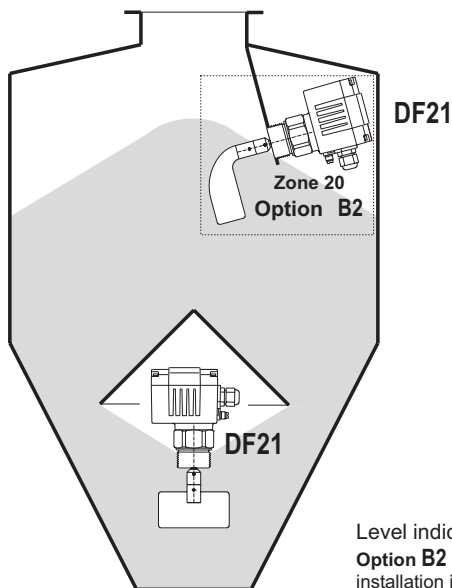
Dosing equipment



Installation inside of a container

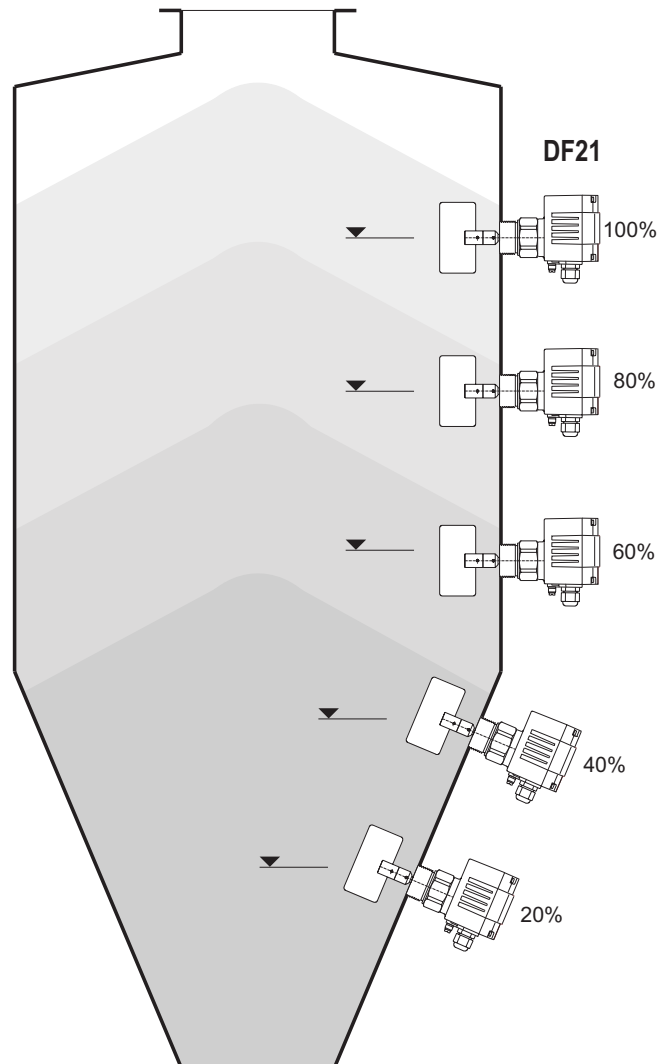


In ATEX areas of **zone 20** choose **Option B2**:
Ex type of protection II D

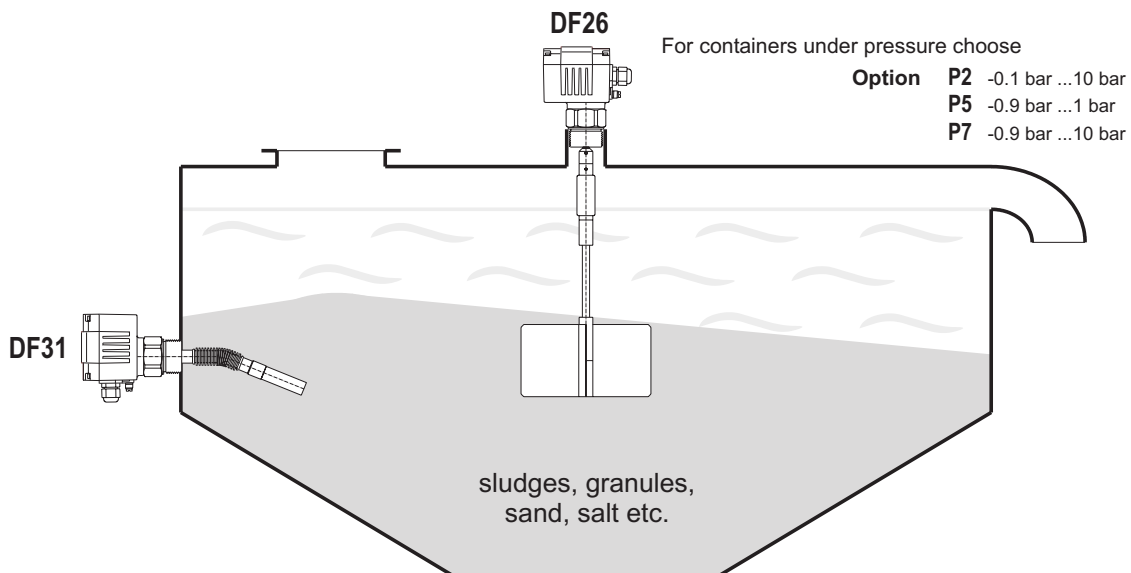


Level indicator with **Option B2** are certified for installation in **zone 20** !!!

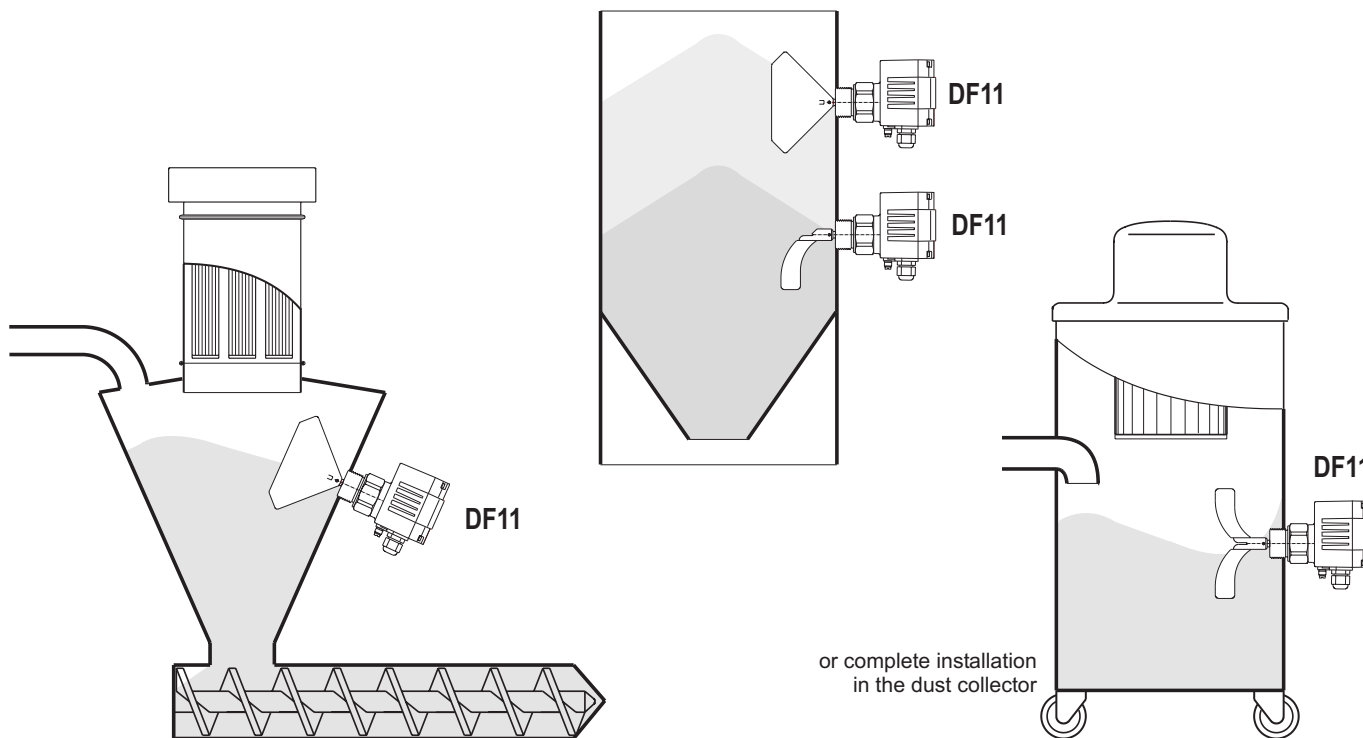
Multiple filling level indication



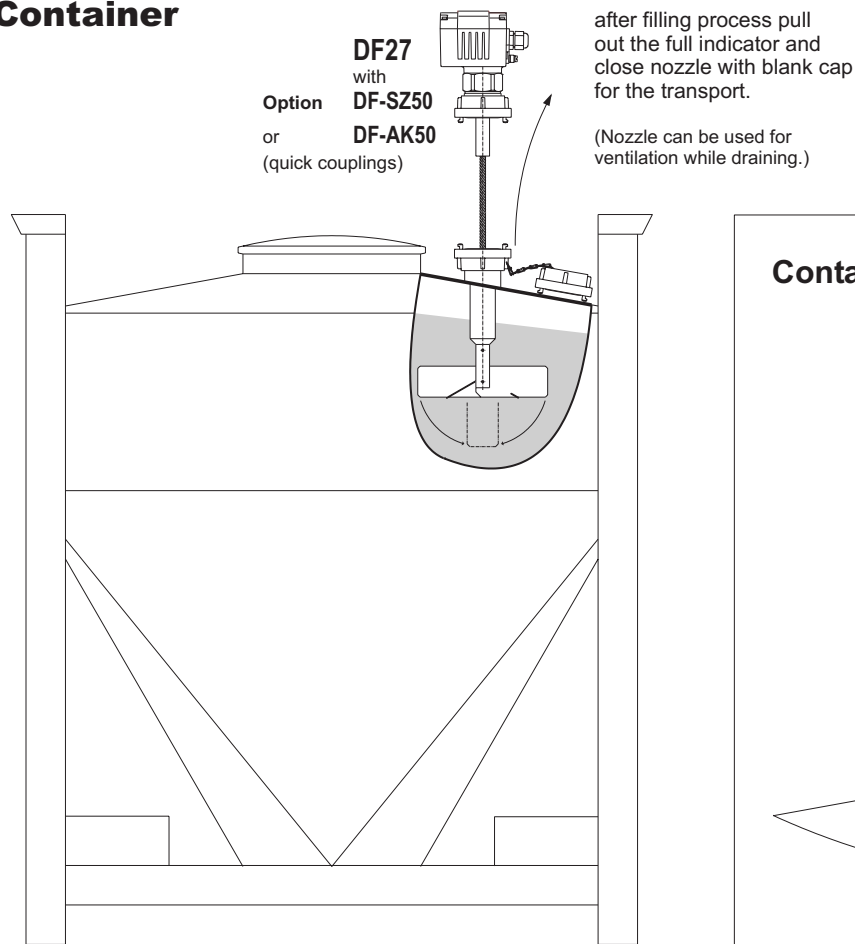
Solids in liquids



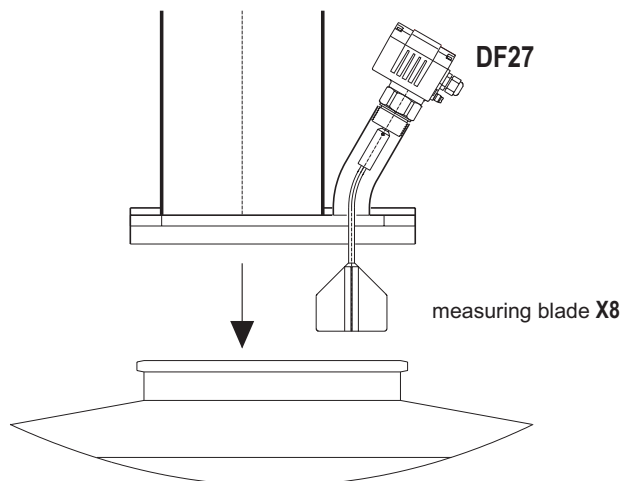
Hopper, bin, industrial vacuum cleaner



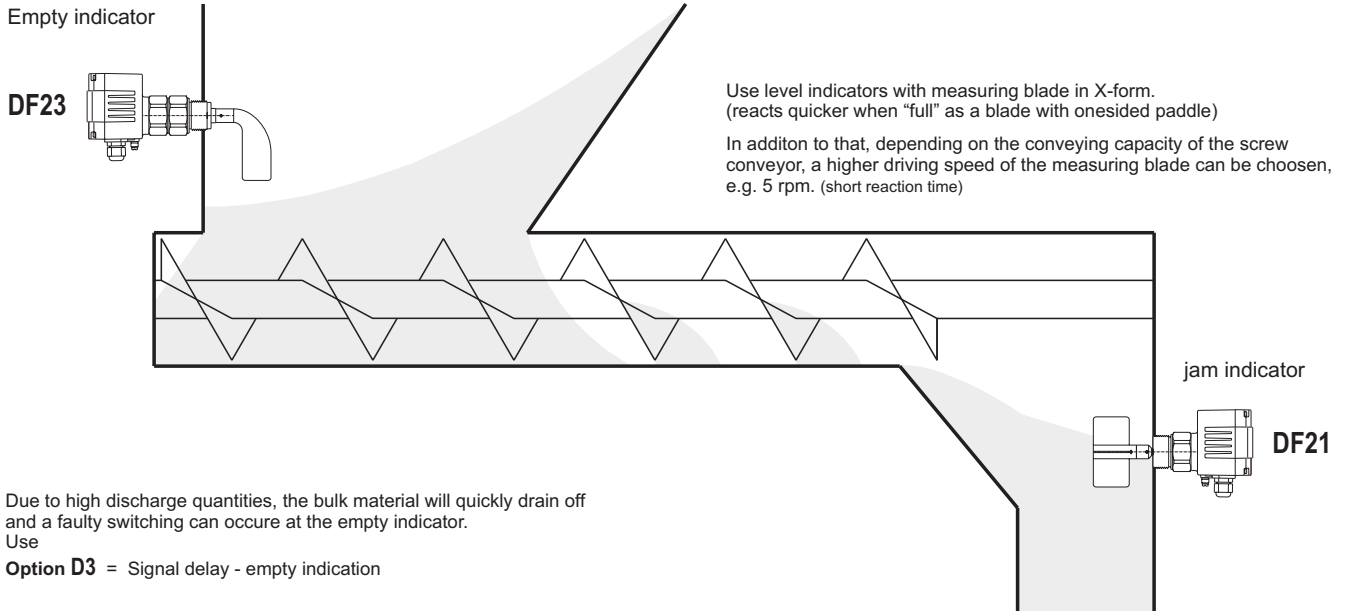
Container



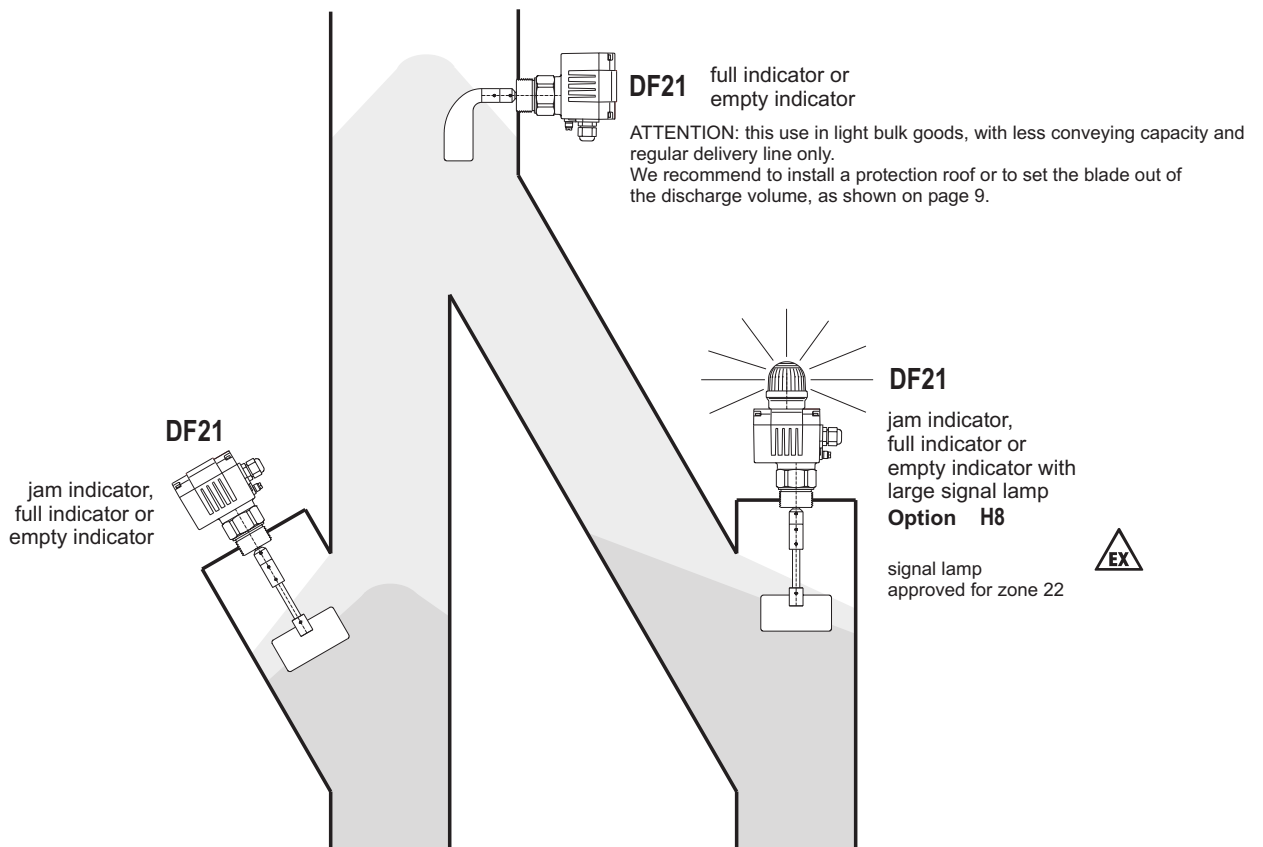
Container or big-bag



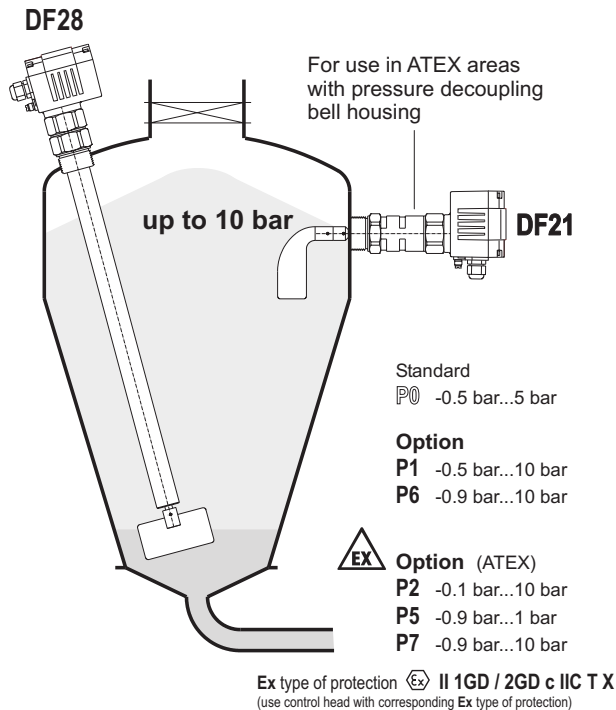
Screw conveyor



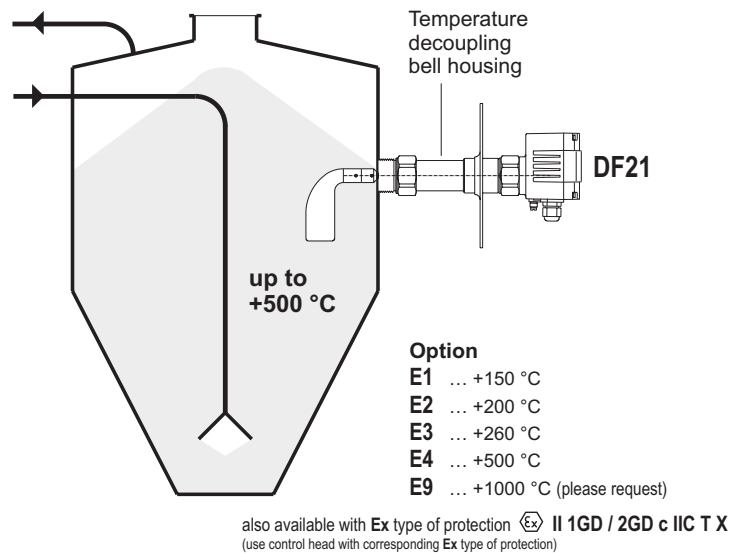
Discharge pipes



Pressure vessel conveyor

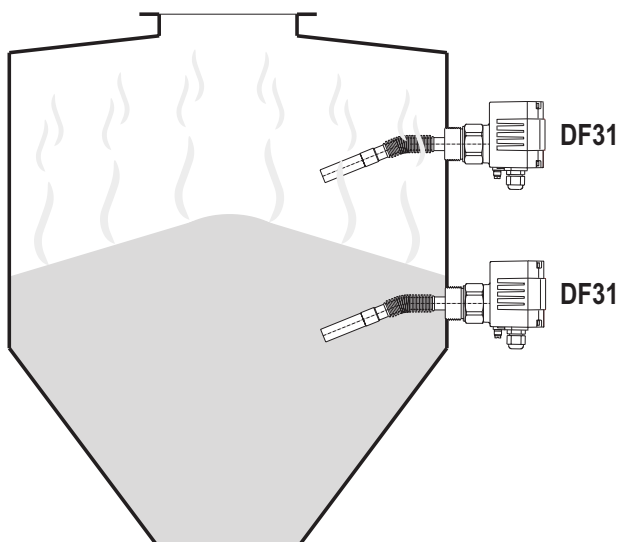


Dryer



Aggressive materials

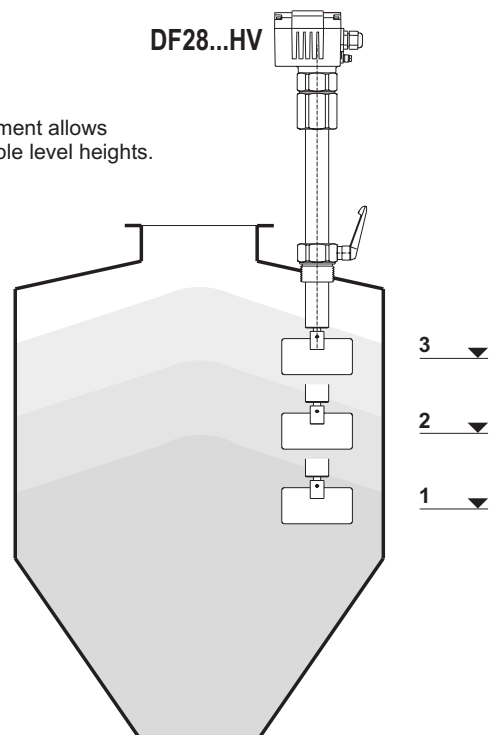
DF31 for use in aggressive bulk goods and/or aggressive gases



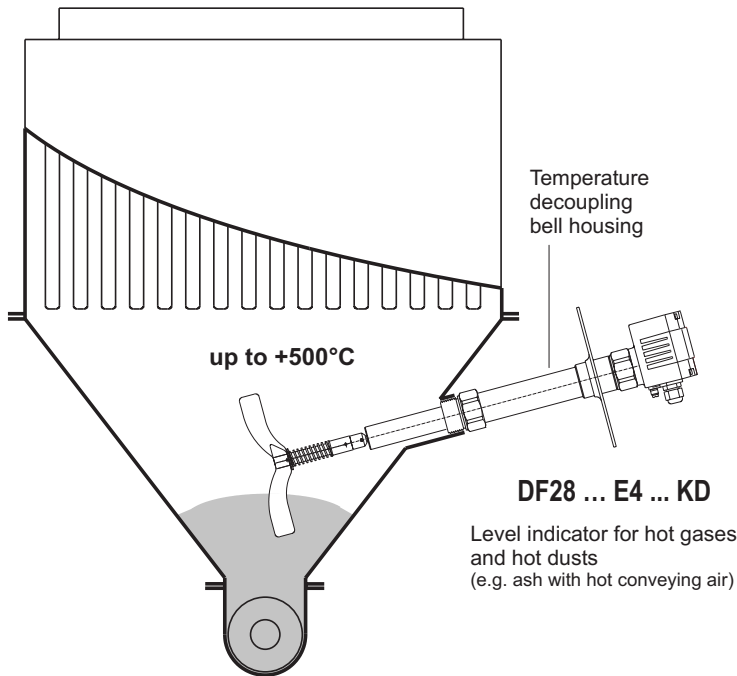
Level adjustment

also available with Ex type of protection **EX** II 1GD / 2GD c IIC T X
(use control head with corresponding Ex type of protection)

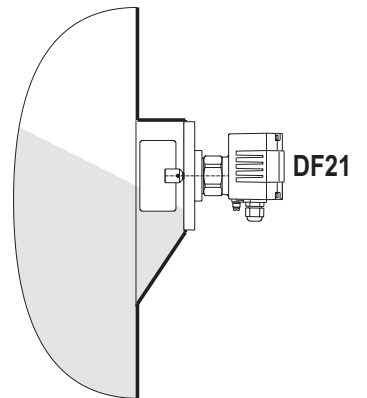
The level adjustment allows settings of variable level heights.



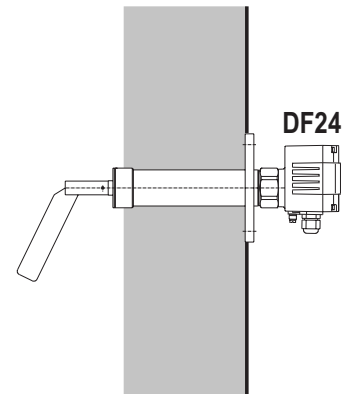
Filter



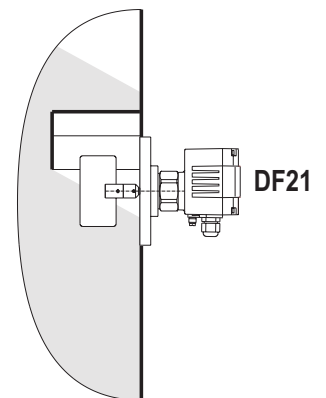
Mounting varieties



Installation in a "pocket" to protect measuring blade and shaft from too high loads.



Mounting in thick silo walls (e.g. silos of concrete) or to penetrate thick stickings at the silo wall

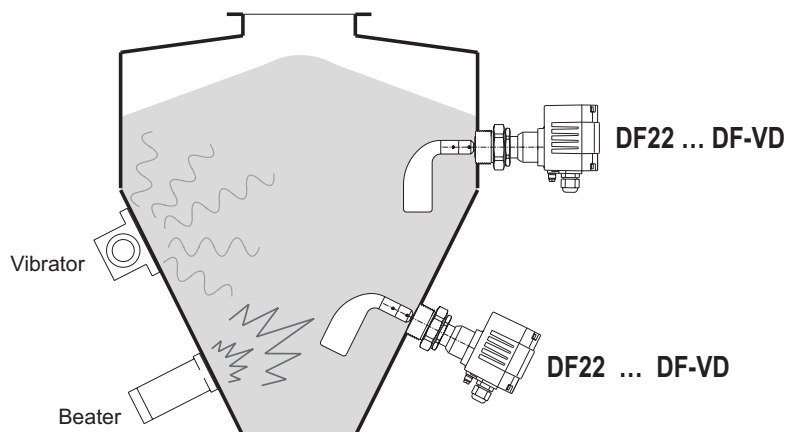


Protection roof above the measuring blade to protect the measuring blade and the shaft from too high loads. e.g. large and heavy bulk material

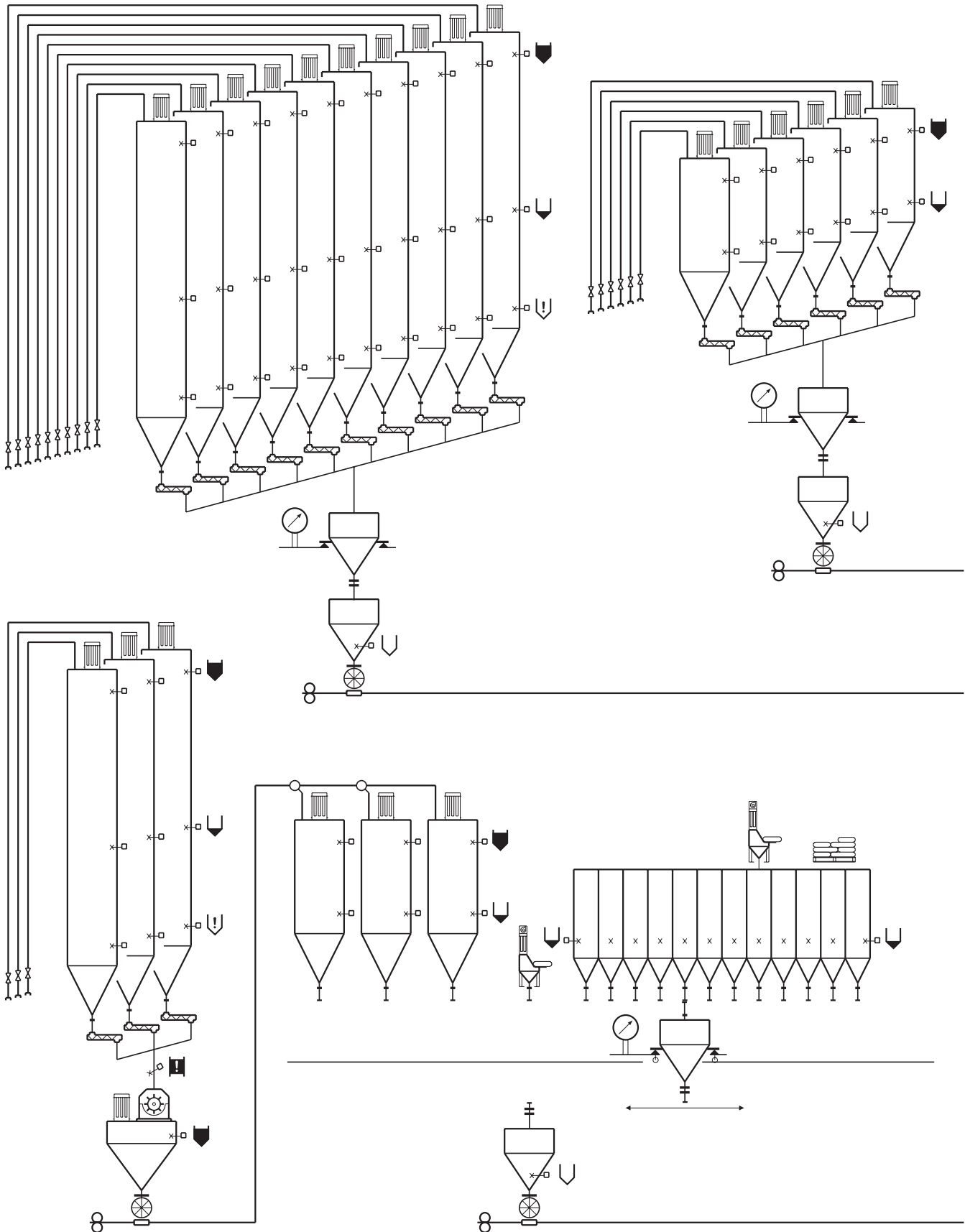
Vibration dampening

Vibration dampening
Option **DF-VD**

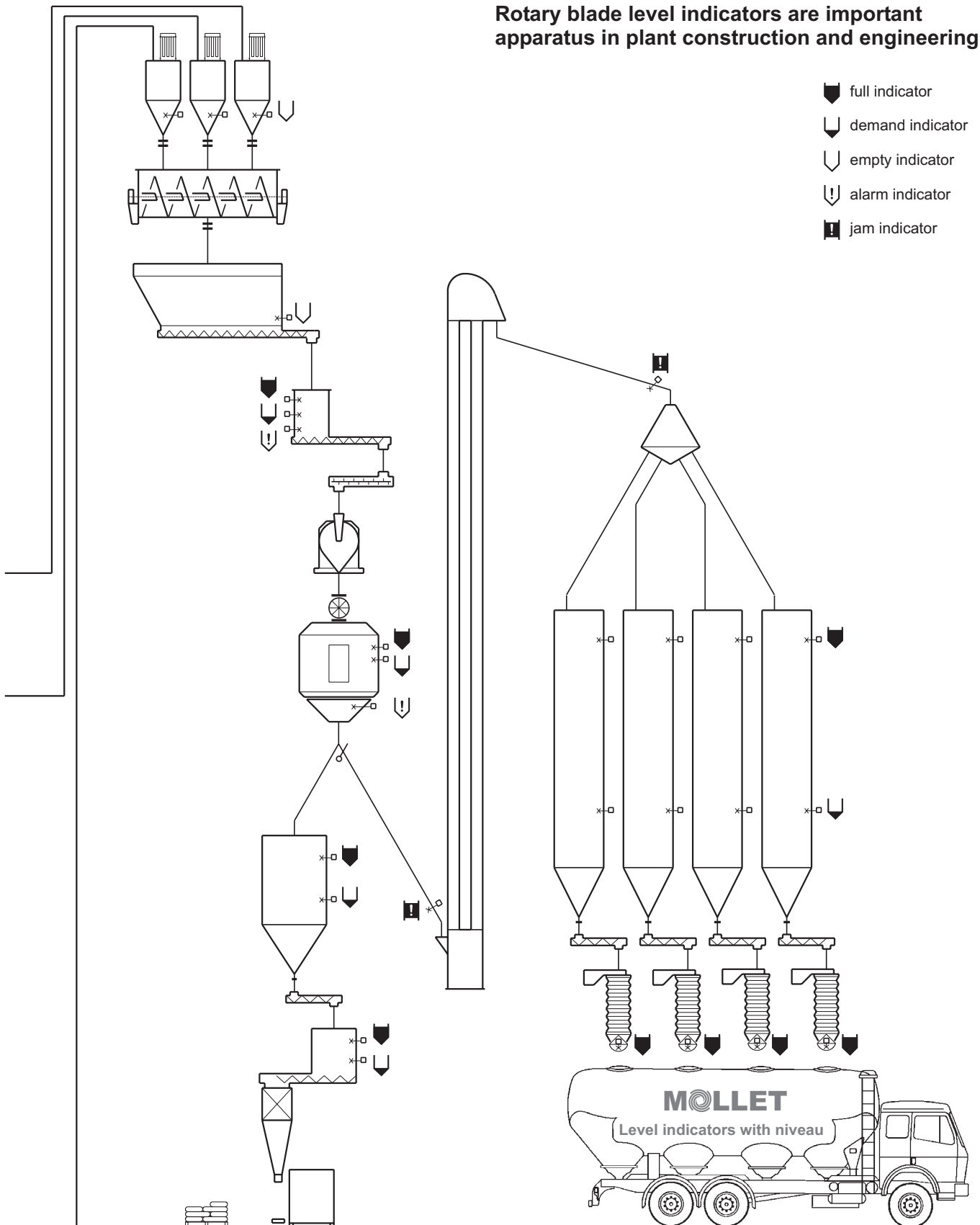
Damps the transmission of vibrations and shocks at the level indicator








Example of a plant for bulk materials with rotary blade level indicators







Rotary blade level indicators are important apparatus in plant construction and engineering



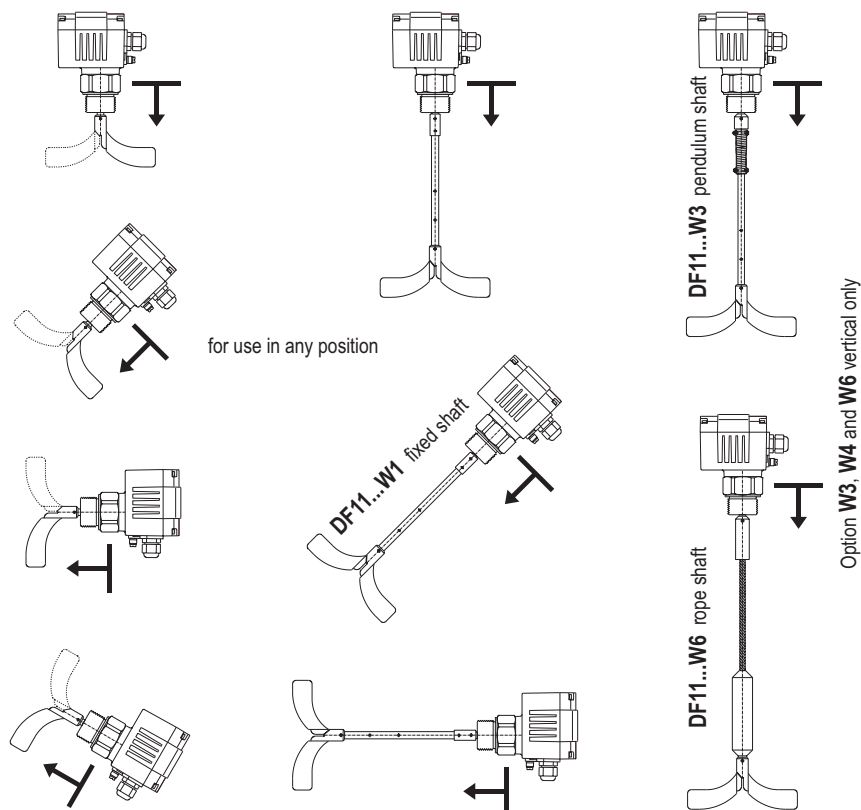
-  full indicator
-  demand indicator
-  empty indicator
-  alarm indicator
-  jam indicator

Mounting positions

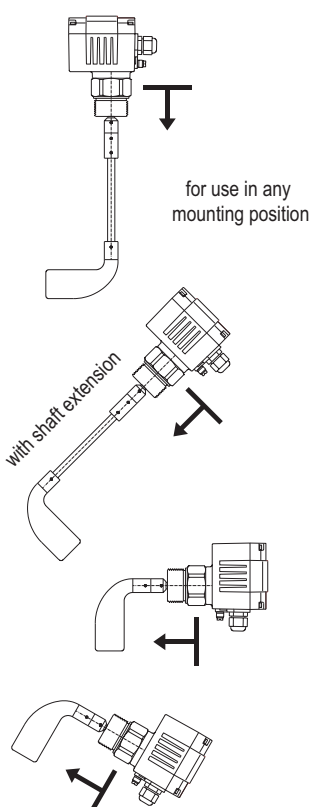
-  vertical from top
-  inclined from top
-  horizontal from side
-  inclined from bottom

Depending on type of device, there are any mounting positions possible, or in vertical or horizontal position only. (see DF25-29 on page 13)

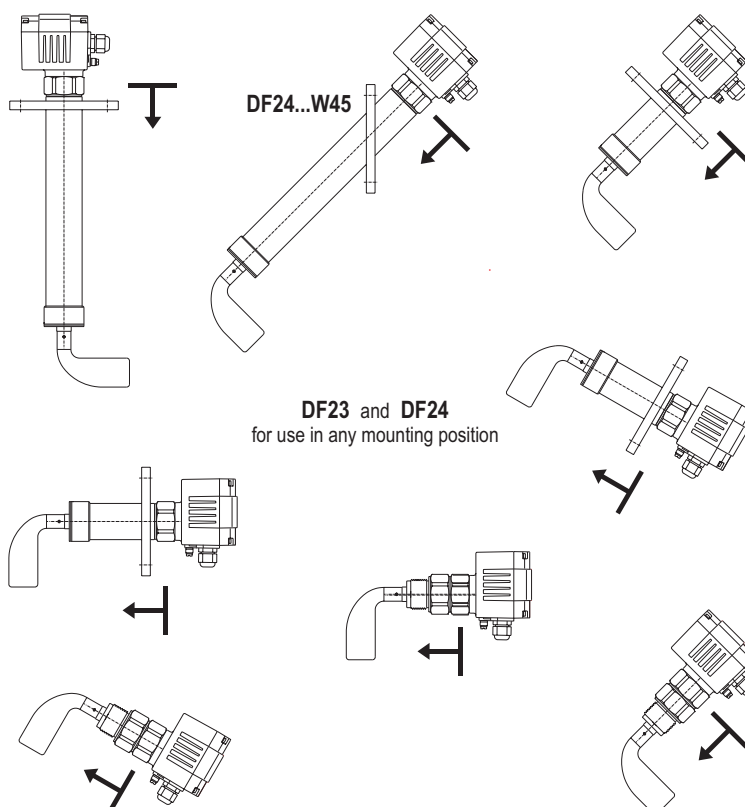
DF11



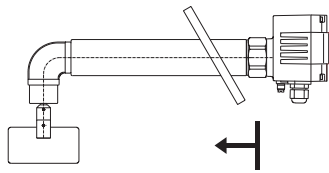
DF21 and DF22



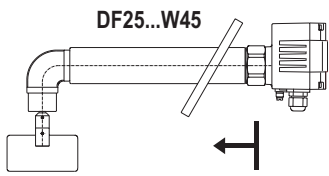
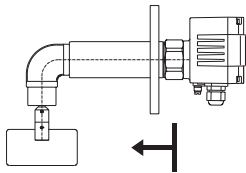
DF23 and DF24



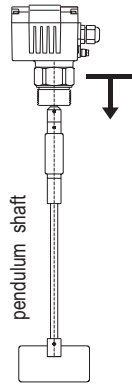
DF25



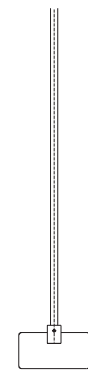
horizontal mounting only



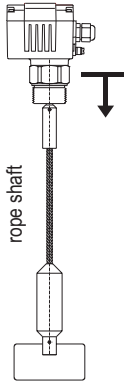
DF26



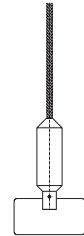
pendulum shaft



DF27



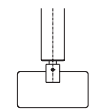
rope shaft



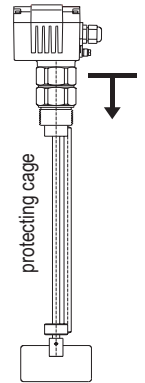
DF28



protecting tube



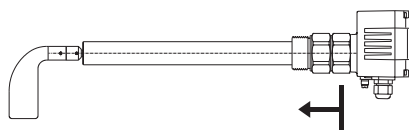
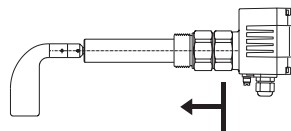
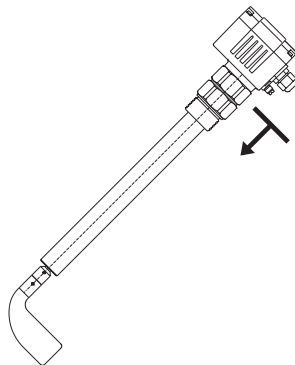
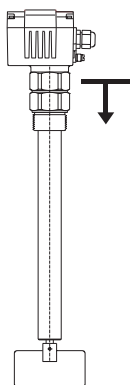
DF29



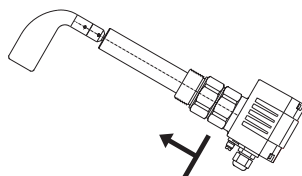
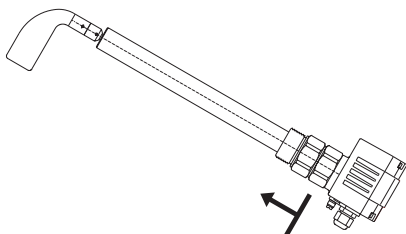
protecting cage

vertical mounting only

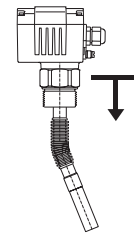
DF28...KD and DF22



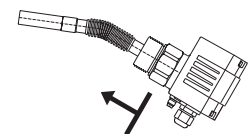
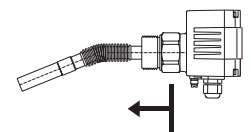
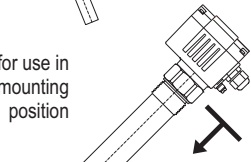
DF22 and DF28...KD
for use in any mounting position



DF31 and DF32



for use in any mounting position



Silo with 2 chambers one upon the other

Filling with pneumatic conveyor equipment

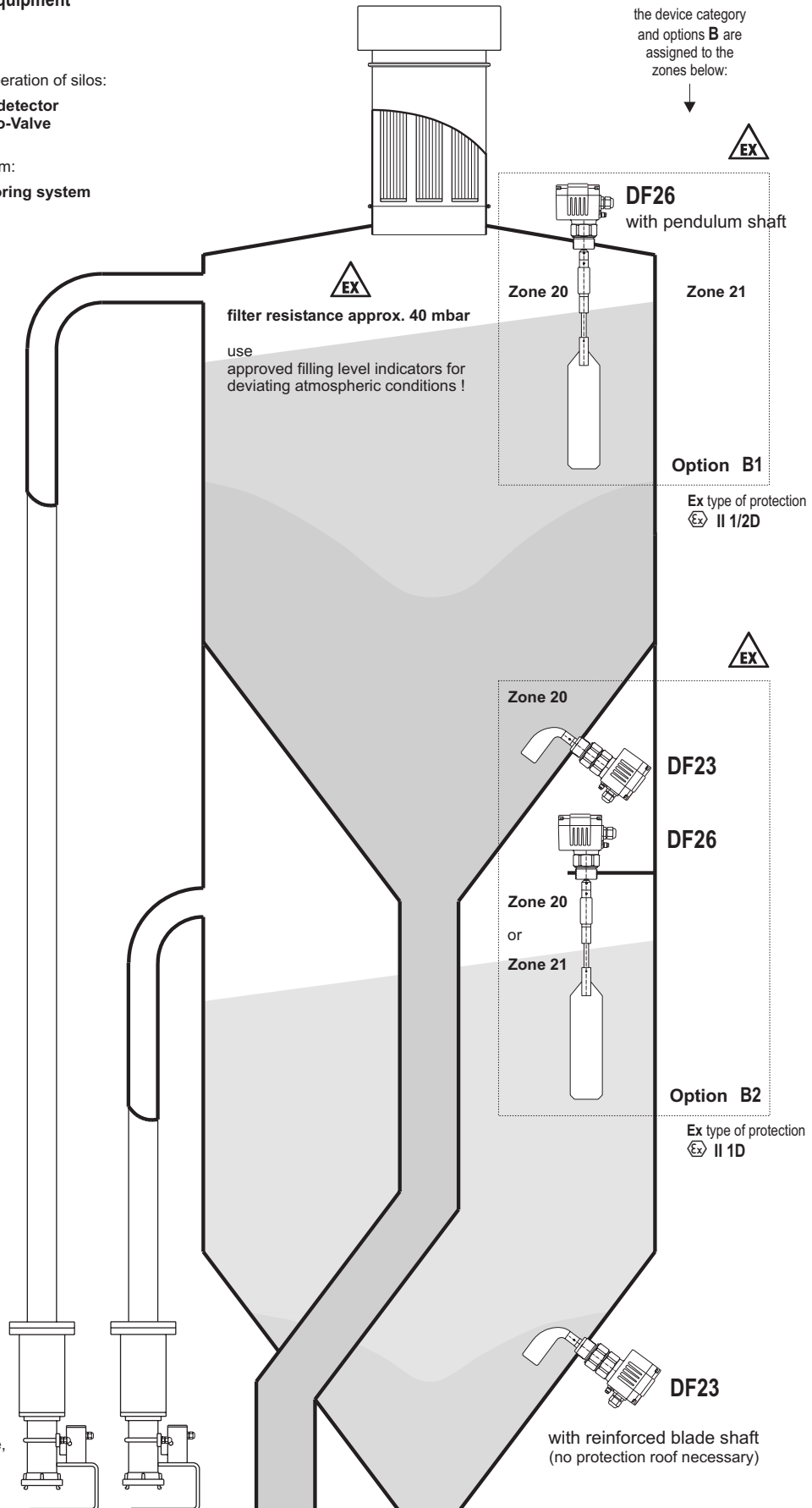
Further devices for a safe operation of silos:

- Silo pressure detector
- Silo Ex-Implo-Valve

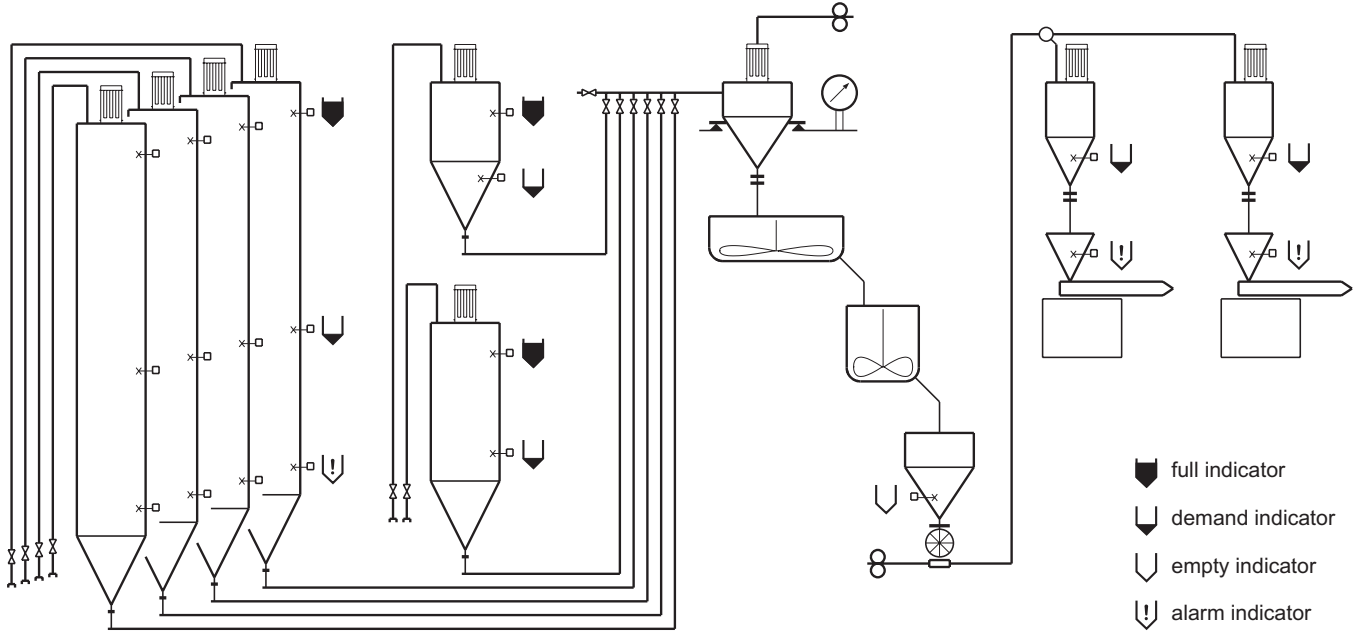
and from our delivery program:

- Silo overflow monitoring system

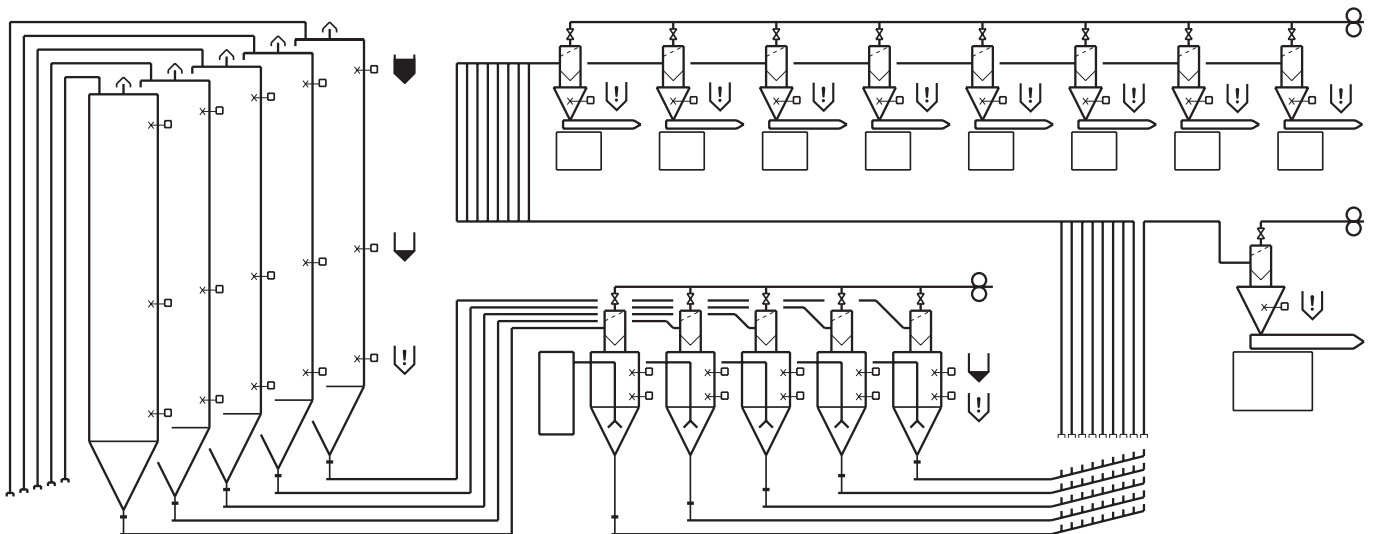
the device category and options **B** are assigned to the zones below:



Silo plant - PVC



Silo plant - plastics granule



Bellow feeder

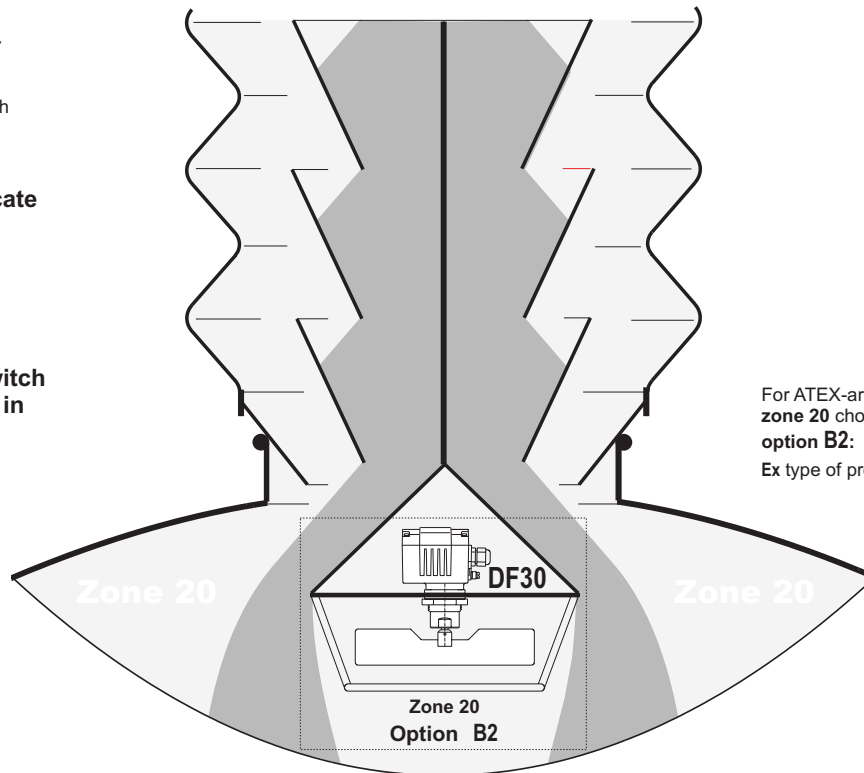
Zone 20
and level indicator installed in the taper closure.

It's not enough to have a taper closure with type of protection IP6X.

A EC-type-examination Certificate is necessary.

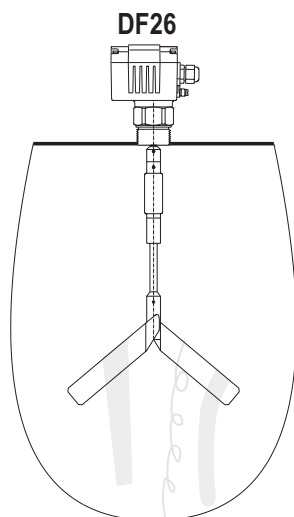
MOLLET provides the solution !!!

Rotary blade level indicators with are Ex-certified for installation in zone 20.



For ATEX-areas in zone 20 choose option B2:
Ex type of protection II 1D

Wood shavings, foil strips

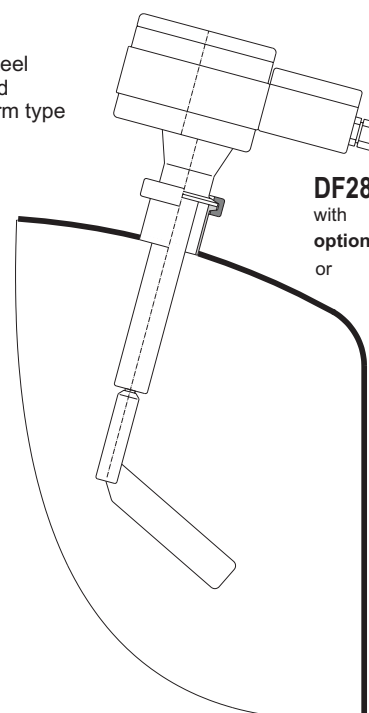


Special measuring blade
option Y2

for use in:
long fiber, wood shavings,
gauze, tinsel (strips of metal),
foamed plastic and foil strips,
sheets etc.

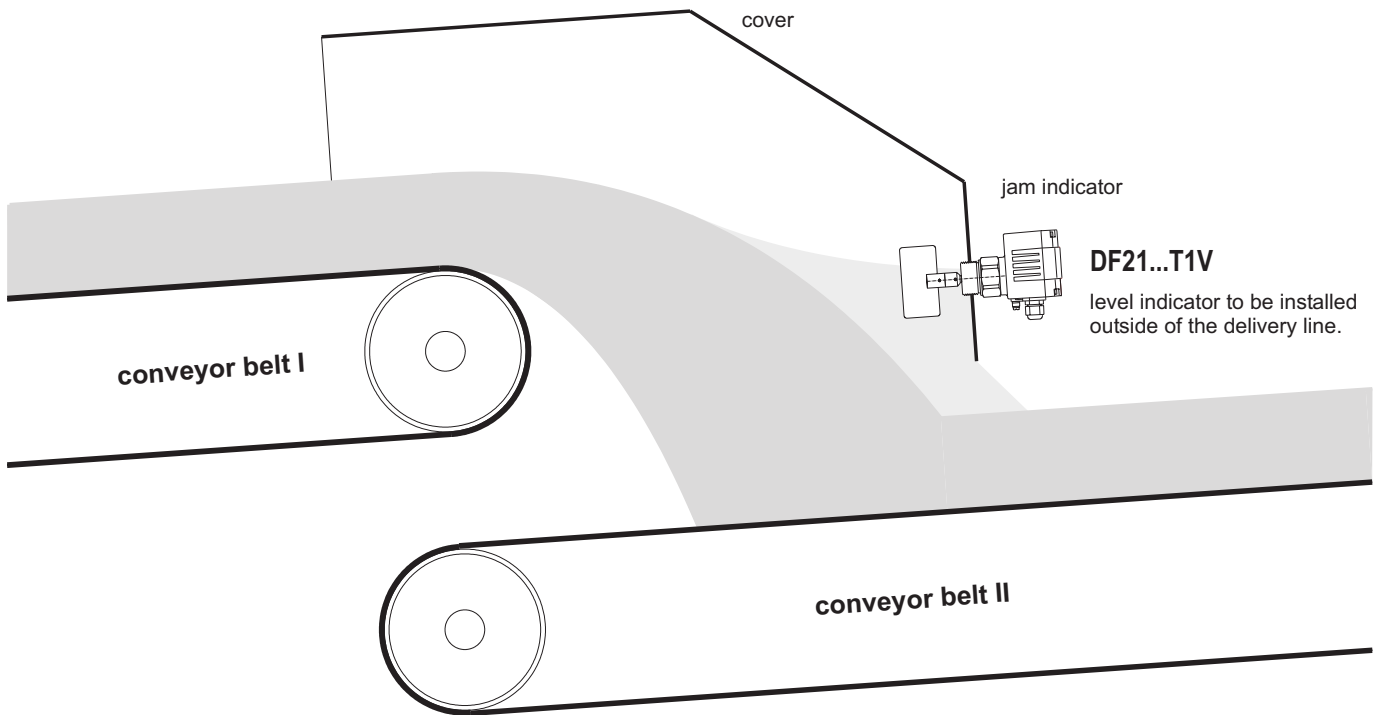
**Clamp couplings,
food industry couplings**

Stainless steel
housing and
FDA-conform type

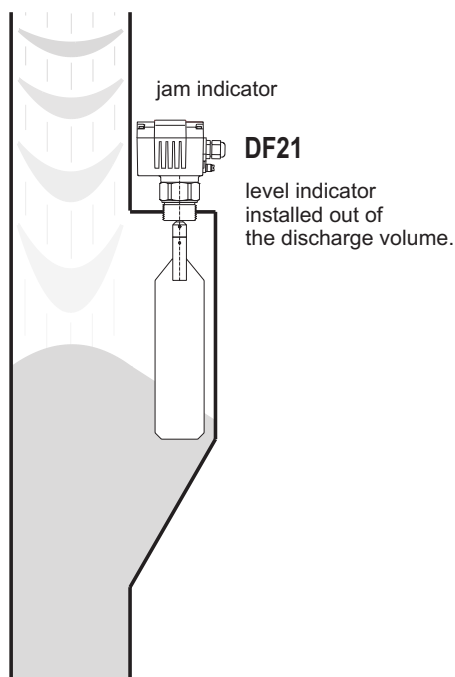


DF28A4...KD-FDA
with
option DF-KV50
or DF-RV50

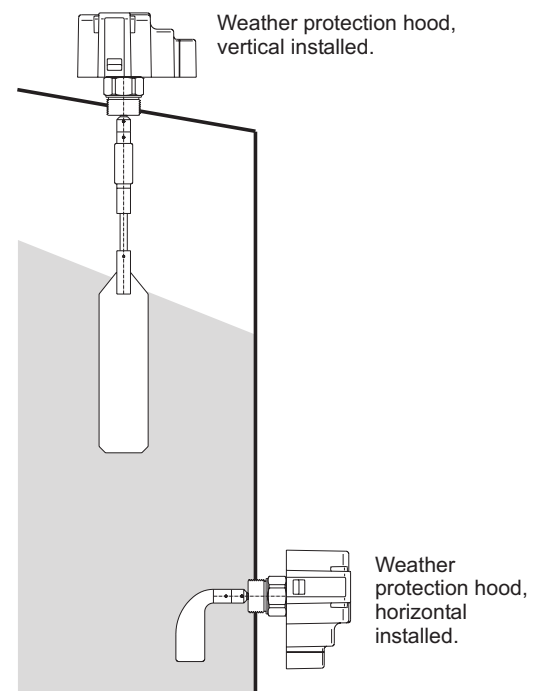
Conveyor belt transfer



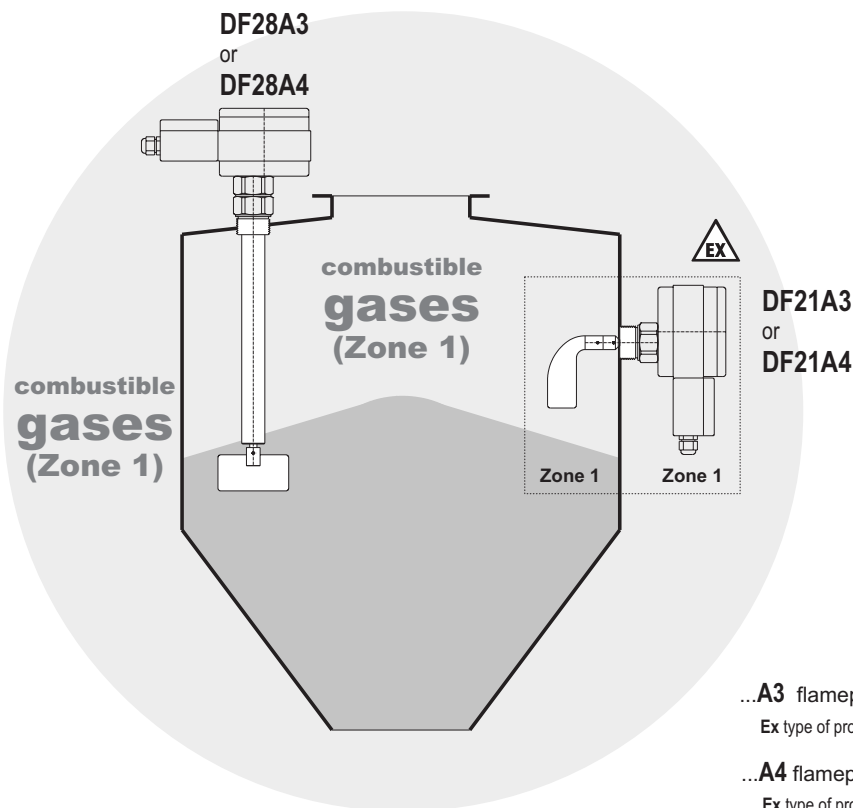
Discharge pipe, vertical



Weather protection hood



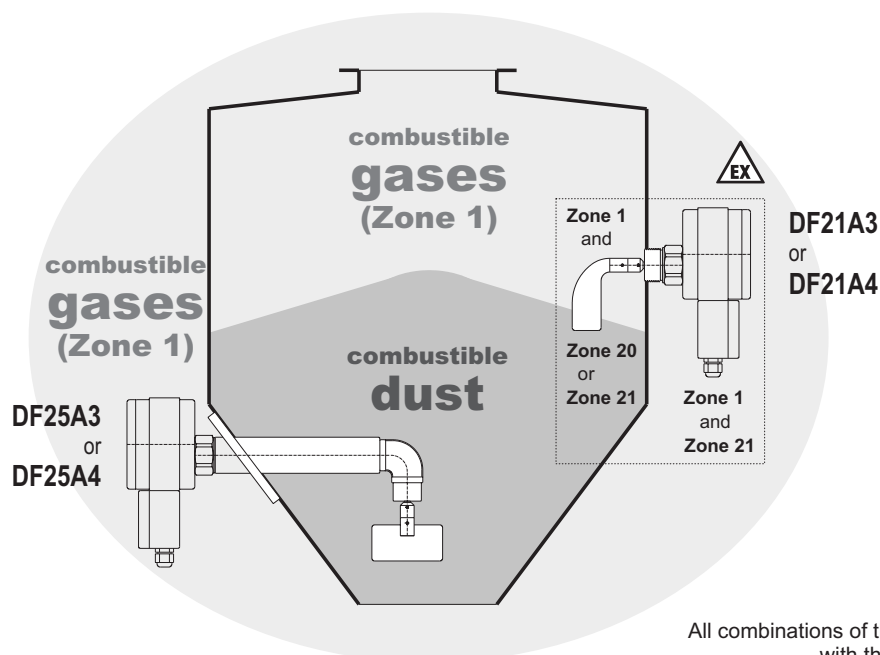
GasEx



...**A3** flameproof enclosed housing in aluminium
Ex type of protection Ex II 1D2G/2GD EEx de IIC T6 T70°C IP66

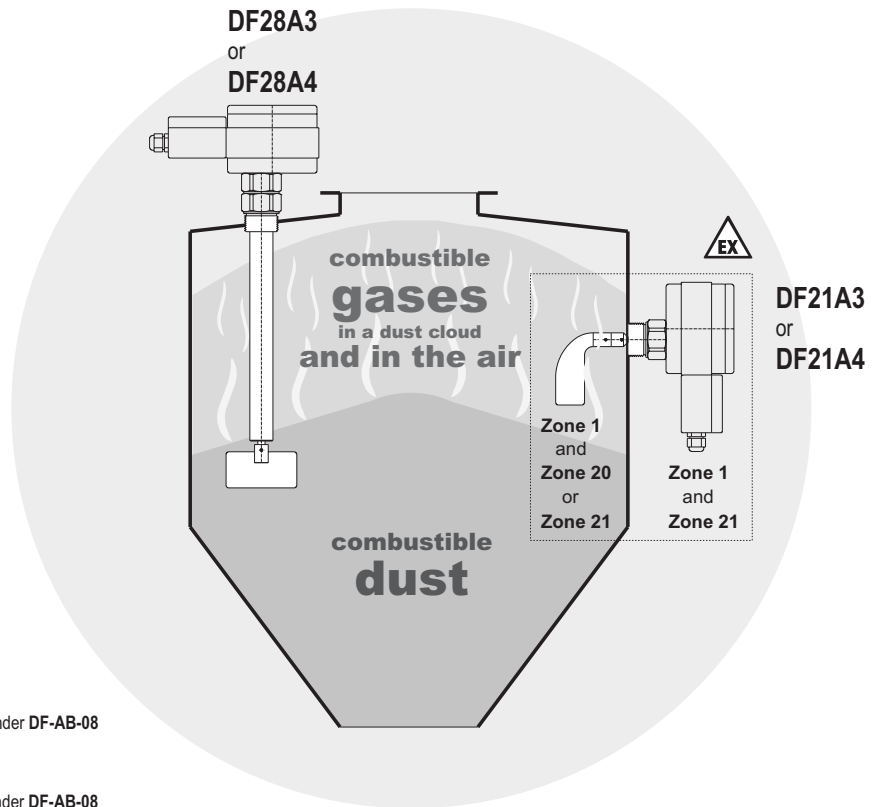
...**A4** flameproof enclosed housing in stainless steel
Ex type of protection Ex II 1D2G/2GD EEx de IIC T6 T70°C IP66

Gas+DustEx (hybrid mixtures)



All combinations of the temperature decoupling bell housing with the pressure decoupling bell housing and in combination with the zone separating element are possible.

Gas+DustEx (hybrid mixtures) outgassing bulk goods



Gas+DustEx (hybrid mixtures) if there is zone 0 inside

