


FF04

Membrane-Level Transmitter for Bunks

- applicable as full or empty indicator
- simple mounting
- requires no room in the bulk tank
- membrane mad of NBR, FKM or stainless steel
- high temperature version up to 200 °C
- output signal: changeover relay with high switching capacity (4 A / 250 V)
-  Ex- version acc. to ATEX optional



Description:

The membrane-level transmitter of the model series FF04 consists of a plastic- or aluminum housing with a membrane which is held by a fastening ring. The devices get installed flush with the tank wall. So they do not extend into the tank. The bulk material pushes against the membrane, which is pre-stressed by a spring, thereby it activates a micro-switch. Depending on the sort and the weight of the bulk the devices can be delivered with different membrane-diameters and different membrane-materials.

Typical application:

For all bunks, from free flowing till hardly flowing, in pressureless tanks.

Models:

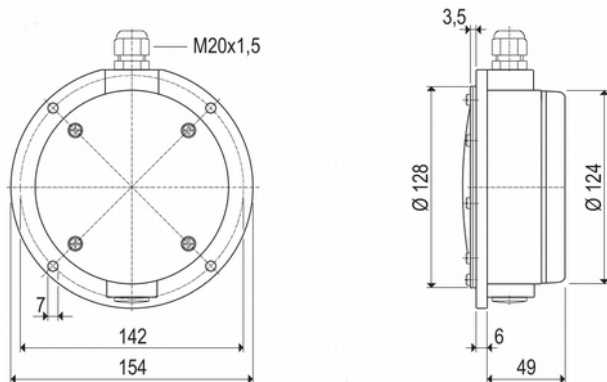
- E:** standard version
membrane diameter 128 mm
- D:** standard version, protection class IP65
membrane diameter 128 mm
- F:** for greater wall thickness
membrane diameter 128 mm
- B:** aluminum housing, high temperature version
membrane diameter 187 mm

Range of application:

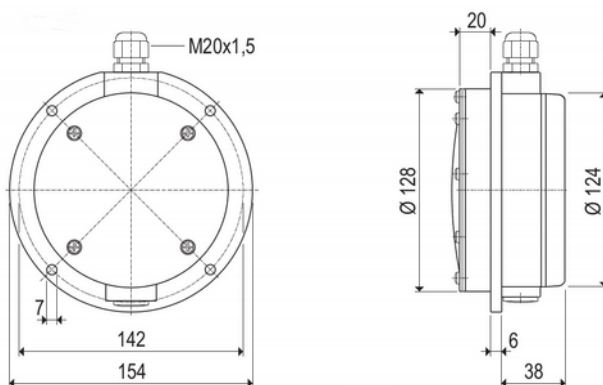
Type	Membrane	Operating temperature	Application:
FF04.E	NBR / FKM	-20...+60 °C	simple, grain-type
FF04.D	NBR / FKM	-20...+60 °C	simple, grain-type
FF04.F	NBR / FKM	-20...+60 °C	bis 30 mm grit
FF04.B	NBR FKM st. steel	-20...+60 °C -20...+150 °C -20...+200 °C	bis 100 mm grit

Dimensions:

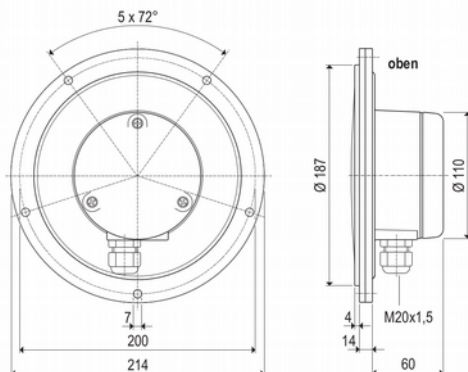
FF04.E / FF04.D:



FF04.F:



FF04.B:



Order Code:

Order number: **FF04.E.N.N.0**

Membrane-level transmitter
for bulks

Housing type:

E = plastic housing
D = plastic housing, IP65
F = for greater wall thickness, plastic housing
B = aluminum housing

Membrane material:

N = NBR
V = FKM
E = stainless steel (not for FF04.D)

Supporting ring:

A = aluminum (FF04.B only)
N = steel, galvanized (not for FF04.B)
E = stainless steel

Options:

0 = without
9 = please specify in plain text

Technical Data:

Material:

Housing: plastic, glass fiber reinforced
(FF04.B: aluminum)

Membrane: NBR, FKM or stainless steel

Supp.- ring: aluminum, steel, galvanized
or stainless steel

Installation position:

optional

Sensitivity:

60...200 g (FF04.E/D/F)
100...500 g (FF04.B)

Bulk weight:

0,3 t/m³ bis 2,5 t/m³ (FF04.D/B)

Temperature range:

see table „range of application“

Pressure range:

for pressureless tanks

Contact rating:

potential free SPDT
4 A / 250 VAC

Cable entry:

M20x1,5

Protection class:

housing type E + F: IP40 (DIN EN 60529)
IP53 (if screwing on top)
IP 65 (with st. steel membrane)

housing type D:
IP 65

housing type B:
IP40 (DIN EN 60529)
IP 53 (if screwing at the bottom)
IP 65 (with st. steel membrane)

Electrical connection:

