

# Diaphragm Switch AD311

## Operating Instructions



### TECHNICAL DATA:

Housing:	aluminium die-casting
Dimensions:	see Fig. 4
Weight:	approx. 1,9kg
Retention ring:	standard: aluminium option: stainless steel
Membrane:	standard: Viton options: Neoprene and stainless steel
Sensitivity:	100 to 300g adjustable (Fig. 2) 200 to 300g if stainless steel membrane see mounting notice
Ambient temperature:	-20 to 150°C -20 to 80°C for neoprene membrane -30 to 200°C for stainless steel membrane
Switching capacity:	max. 8A at 250VAC
Cable entry:	PG11 screwing
System of protection:	IP53 if air compensation filter is mounted towards the bottom, otherwise IP40

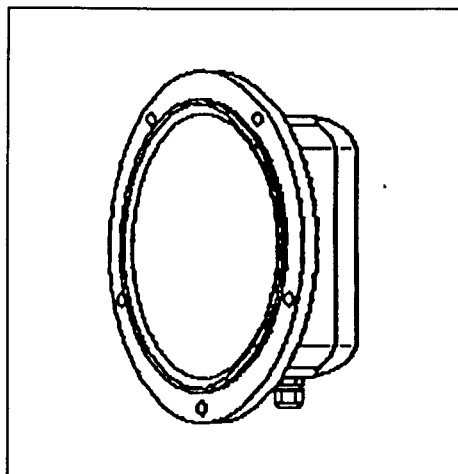


Fig.1

### APPLICATION:

As "full sensor", "empty sensor" or "demand sensor" for dustlike and pulverized as well as granular bulk materials with granulation up to 100mm and bulk weight of 0,3t to 2,5t/m<sup>3</sup>.

### MOUNTING OPTIONS:

The mounting angle may vary between 0° to 45° towards wall of silo.

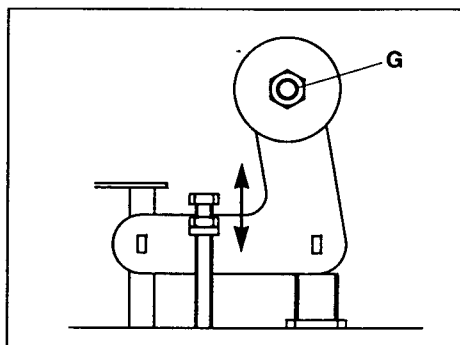


Fig.2

### FUNCTION:

The membrane is held by a screwed ring. The membrane transfers the pressure of the bulk good by means of a plunger onto the micro switch mounted in the casing. The sensitivity can be adjusted by changing the travel of the spring (Fig. 2). The bulk good presses the prestressed membrane to the stopper by its own weight. The micro switch switches over the change-over contact. If the pressure of the bulk good is reducing, the membrane will be relieved and the contact will be switched back (Fig. 3).

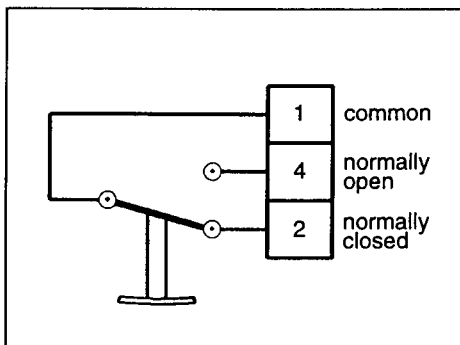


Fig.3

### ATTENTION - MOUNTING NOTICE!

Remove the transport protection inside (corrugated cardboard). Do not damage membrane with sharp objects!

In case of lightweight bulk goods mount the additional counterweights (Fig. 2, G).

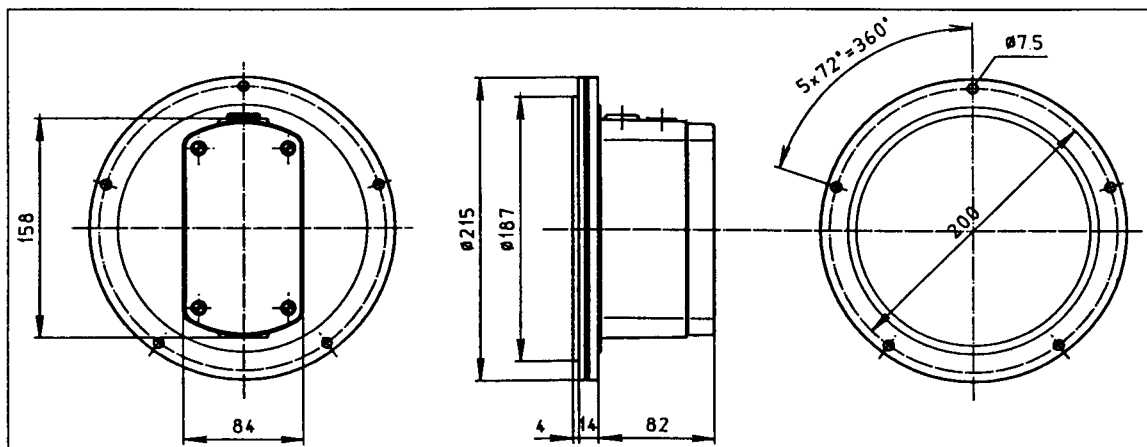


Fig.4