



MS-04

Membrane Level Switch for Bulk Goods



Features

- / Can be used as full & empty detector
- / Easy to assemble
- / Does not require space in the vessel
- / Neopren, Viton or stainless steel membranes
- / High temp. version up to 200°C
- / Output signal: change-over contact with high switching cap. (4 A / 250 V)

Description:

The MS-04 series of membrane level switches consists of a plastic or aluminium housing with a membrane held in place by a fastening ring. They are mounted aligned into the vessel wall and, therefore, do not project into the vessel. The bulk material applies pressure against the membrane which is prestressed by a spring and thereby actuates a micro-switch. Depending on the type of bulk material and its weight, the devices can be supplied with different membrane diameters and membrane material.

Application:

The device is suitable for all freely trickling or hardly flowing bulk materials in non-pressurized vessels.



Technical Specifications:

Material /

- Housing: plastic, fiber glass reinforced or aluminium
- Membrane: NBR, Viton or stainless steel
- Mounting ring: aluminium, Zn plated steel or st. steel

Mounting position /

any

Pressure range /

for non-pressurized vessels

Overpressure security /

1 bar

Switching load /

potential-free change-over contact
4 A / 250 VAC

Switching voltage /

24 V...250 VAC or 12 V...125 VDC

Cable insert /

screw joint M20 x 1.5

Protection class /

- IP 40
- IP 53 if compensating filter is downwards
- IP 65 with stainless steel membrane
- IP 66 with aluminium housing and stainless steel membrane (MS-04.B max. IP 65)

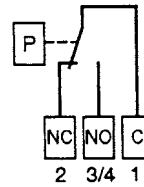
Temperature range /

Type	Membrane	Bulk temperature
MS-04.E	NBR / Viton	-20...+60 °C
	stainless steel 1.4301	(housing aluminium +80°C)
MS-04.F	NBR / Viton	-20...+60 °C
		(housing aluminium +80°C)
MS-04.B	NBR	-20...+80 °C
	Viton	-20...+150 °C
	stainless steel 1.4301	-20...+200 °C
MS-04.D	NBR / Viton	-20...+70 °C

Possible Combinations:

Type	Membrane	Mounting ring	Housing
MS-04.E	NBR / Viton / SS	Zn-plated steel / SS	plastic
MS-04.E	SS	SS	aluminium
MS-04.F	NBR / Viton	Zn-plated steel / SS	plastic
MS-04.F	SS	SS	aluminium
MS-04.B	NBR / Viton / SS	aluminium / SS	aluminium
MS-04.D	NBR / Viton	Zn-plated steel / SS	plastic

Electrical Connection:

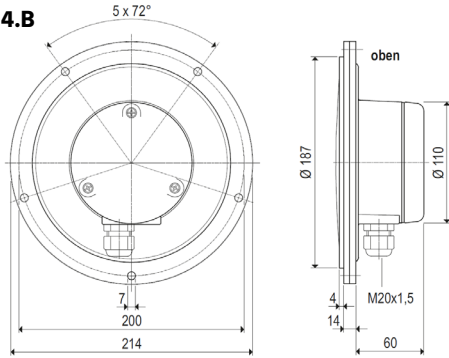


Ordering Codes:

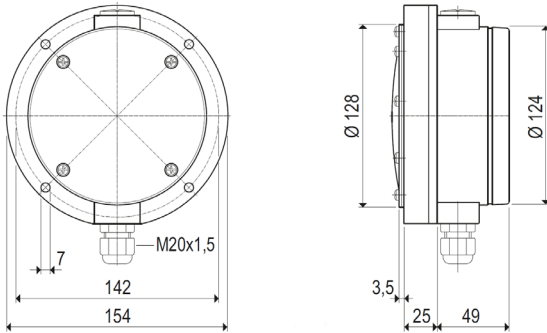
Order number	MS-04.	E.	N.	N.	K
MS-04 Membrane Level Switch					
Housing design /					
E = Ø 128 mm, standard version					
F = Ø 128 mm, construction for larger vessel wall thickness					
B = Ø 187 mm, construction for high temperature					
D = Ø 128 mm, construction with double-membrane					
Membrane material /					
N = NBR					
V = Viton					
E = stainless steel 1.4301 (with mounting ring in stainless steel only)					
Mounting ring /					
A = aluminium					
N = Zn-plated steel					
E = stainless steel 1.4301					
Housing /					
A = aluminium					
K = plastic (fiberglass reinforced)					

Dimensions in mm:

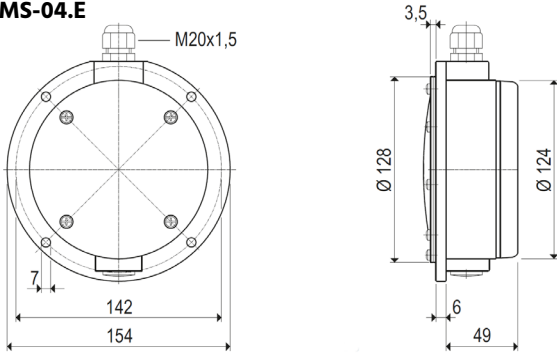
MS-04.B



MS-04.D top



MS-04.E



MS-04.F

