NK08 ‖ Level probe - DNV-GL type-tested

Application

Level probes of type series NK08 are used in connection with transistor control relays ER76 for automatic control of conductive liquids and regulation of liquid levels.

For example:

- Pumps protected against dry running,

- condensate levels can be monitored.

Principles of Operation

As soon as the liquid moistens the electrode, a conductive connection to the ground electrode is created (metal body with screw-in thread, switching point 3), depending on the method of operation. The conductivity of the liquid must be at least 5 µS/cm. Contact with the conductive liquid sets and switches the output relay.

Example diesel oil filter:

Mounting from bottom

If the contact switching point 1 is wetted with the conductive liquid, the switching points 3 and 1 are connected. In this case the contact switching point 1 is wetted with the conductive liquid.

moment the valve opens and drains the liquid (condensate). The valve remains open in conjunction with the switching relay until switching point 2 no longer detects any conductive liquid. Now closes the valve and the process starts again.
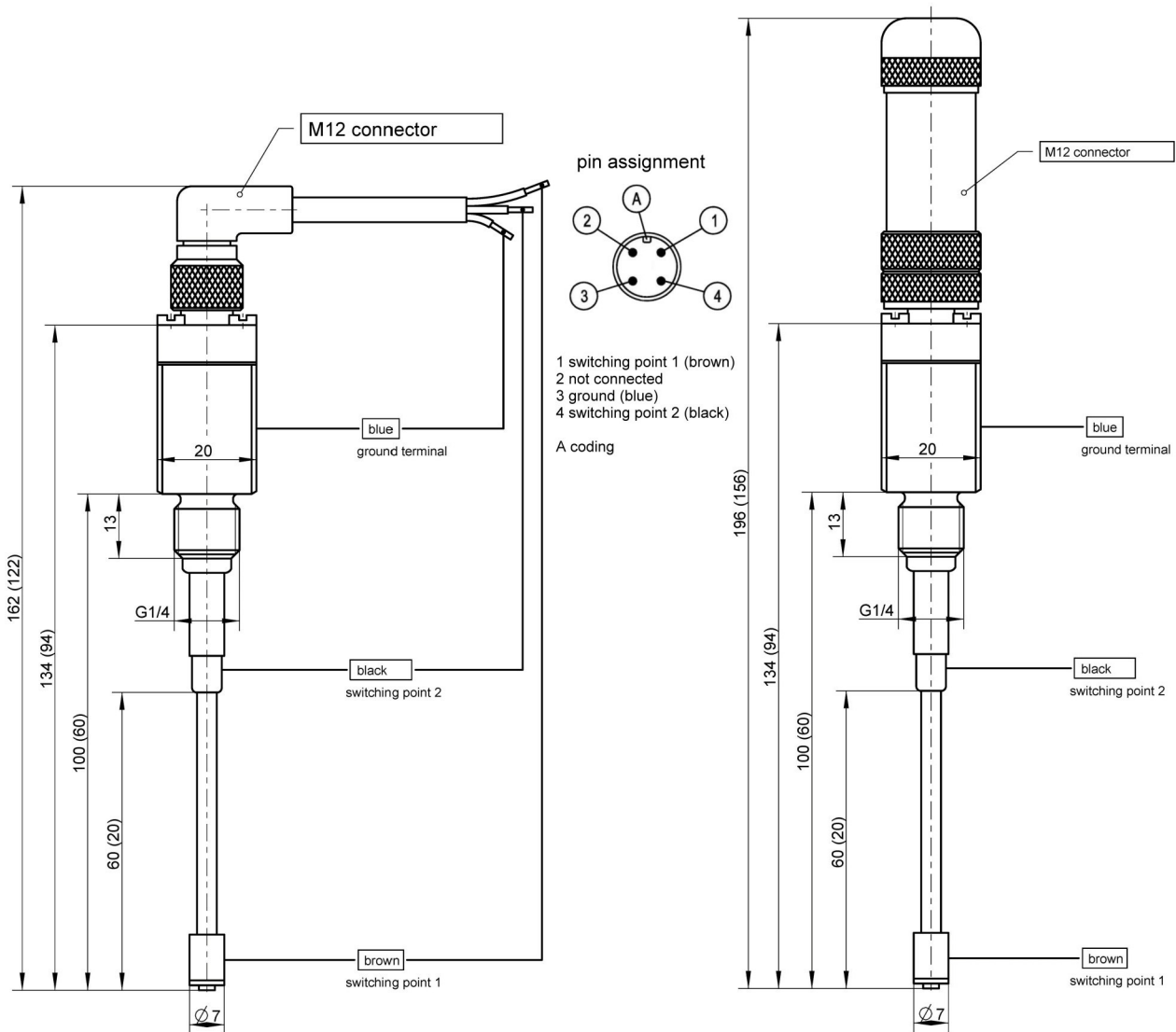

Specifications

Operating pressure	6 bar (max.)
Protection class	IP 65
Electrical connection	M12 connection plug, 4 pin
Max. rated voltage	125V
Perm. medium temperature	60°C
Perm. ambient temperature	-20 to +50°C
Material: Electrode head	1.4305
Material: Electrode	Stainless steel (1.4305)/ Viton$^{®}$
Conductivity of the liquid	5 µS/cm (min.)
screw-in spigot	G 1/4 A
Approval	
DNV-GL type-tested	Certificate no. TAA001ZT

Dimensions (all units in mm unless otherwise stated)

M12 connector

pin assignment

1 switching point 1 (brown)
2 not connected
3 ground (blue)
4 switching point 2 (black)

A coding

blue
ground terminal

20

13

G1/4

black
switching point 2

162 (122)

134 (94)

100 (60)

60 (20)

brown
switching point 1

Ø7

M12 connector

blue
ground terminal

20

13

G1/4

black
switching point 2

196 (156)

134 (94)

100 (60)

60 (20)

brown
switching point 1

Ø7

Ordering code

| Level Sensing Probe | NK08 | 2 | 1 | 0 | | | | 0 | |

Number of Switching Points
2 Switching Points .... > 2

Electrode Sheathing / Gaskets
Viton® .... > 1

Materials
Electrode head and electrode 1.4305 .... > 0

Length of Electrode (measured from sealing surface)
 60 mm ....> 0 6 0
100 mm ....> 1 0 0

Approval Options
Standard model .... > 0
DNV-GL type approved model .... > Z