Level Switches

NV

- p_{max}: 16 bar; t_{max}: 110 °C
- Material:
  brass or stainless steel
- Connection:
  G ¾, M 27 x 1.5

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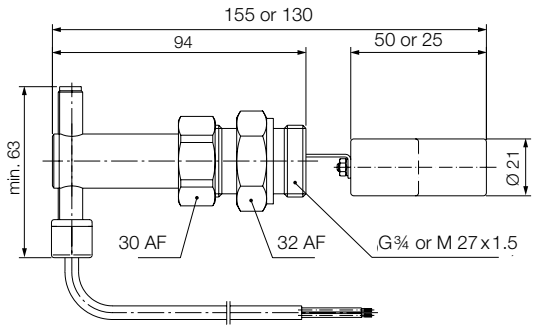
Description

The KOBOLD level switch model NV is a reasonably-priced compact instrument for monitoring levels. A stainless steel cylindrical float attached to one end of a balance arm moves up and down with the liquid level.

The motion of the float is transferred to a permanent magnet fitted at the other end of the balance arm. The permanent magnet switches a reed contact that is fitted in a sliding tube outside the medium. The tube is set as a N/O contact at the factory, that is, the contact closes when the level rises. The switching function is reversed by moving the tube. The instruments are delivered in standard sleeves for side installation. PTFE tape is used to seal the switch.

Dimensions



Re-adjusting the contact unit

To re-adjust the contact unit the locking plate on the top part of the housing must be loosened and the contact unit moved.

Blue (white) or red arrows are situated on the contact unit for re-adjustment purposes. The front edge of the locking plate serves as an adjustment mark.

- **N/O contact:**
  Adjust the contact unit near the red arrow. The contact closes as the liquid level rises.
- **N/C contact:**
  Adjust the contact unit near the blue (white) arrow. The contact opens as the liquid level rises.

Technical Details

Housing:	NV-11..: brass, Ms 58 NV-12..: stainless steel, 1.4301
Connections:	NV-11..: brass, Ms 58 NV-12..: stainless steel, 1.4301
Float:	stainless steel, 1.4301
Leaf spring:	stainless steel, 1.4310
Balance arm:	stainless steel, 1.4310
Sleeve:	NV-11..: brass, Ms 58 NV-12..: stainless steel, 1.4301
Contact tube:	Polyamide
Seal:	NV-11..: NBR NV-12..: FPM
Max. temperature:	110 °C
Max. pressure:	16 bar
Installation position:	horizontal

Bistable reed contact

R	N/O contact / N/C contact Standard max. 2 A, max. 230 $V_{AC/DC}$, max. 40 W, 40 VA
U	Changeover contact Standard max, 0.5 A, max. 150 $V_{AC/DC}$, max. 20 W, 20 VA
C	N/O contact / N/C contact 2 A, 20 V_{AC}, 0.18 A, 230 V_{AC}, max. 40 W
D	Changeover contact 0.13 A, 150 V_{AC}, 0.5 A, 40 V_{AC}, max. 20 W

Electrical connection:	PVC cable
Contact resistance:	max. 80 mΩ
Closing point:	max. 6 mm (above centre line)
Opening point:	max. 3 mm (below centre line)
Switching hysteresis:	approx. 8 mm
Density:	>0.8 kg/dm³ ... 25 mm float >0.7 kg/dm³ ... 50 mm float
Protection:	IP 65

Applications

- Heating boilers
- Car washes
- Cleaning machines

Order Details (Example: **NV-1101R1**)

Model	Material	Connection/length of float	Contact type	Cable type / length
NV-	**11** = brass **12** = stainless steel	**01** = G¾; 25 mm **02** = M27 x 1.5; 25 mm **03** = G¾; 50 mm **04** = M27 x 1.5; 50 mm	**R** = N/O contact (Standard CE) **C** = N/O contact (cCSAus) **U** = Changeover contact (Standard CE) **D** = Changeover contact (cCSAus)	**PVC cable** **1** = 1.5 m (Standard) **2** = 2.0 m[1)] **4** = 3.0 m[1)] **6** = 4.0 m[1)] **8** = 5.0 m[1)] **P** = PVC cable, special length[2)] **S** = Siliconecable[2)3)] **G** = yellow PUR cable[2)3)]

[1)] only for N/O contact "R" and "C" [2)] length as described [3)] only for N/O contact "R"

No responsibility taken for errors;
subject to change without prior notice.

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