



## Level Switches



measuring  
•  
monitoring  
•  
analysing



- Pressure: max. 16 bar
- Temperature: max. 110 °C
- Material: brass or stainless steel
- Connection: G 3/4, M 27x1.5



N1

KOBOLD companies worldwide:

ARGENTINA, AUSTRIA, BELGIUM, CANADA, CHILE, CHINA, COLOMBIA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, INDIA, IRAN, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, SINGAPORE, SLOVAKIA, SPAIN, SWITZERLAND, THAILAND, USA, VENEZUELA, VIETNAM

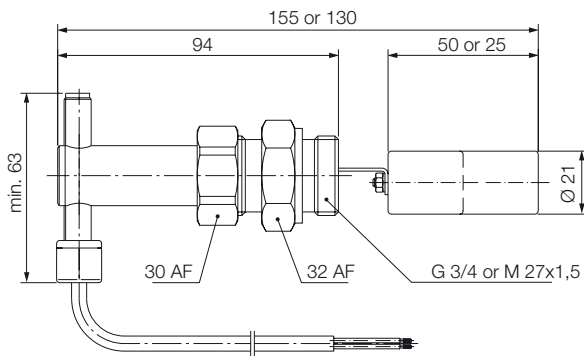
KOBOLD Messring GmbH  
Nordring 22-24  
D-65719 Hofheim/Ts.  
☎ +49(0)6192 299-0  
Fax +49(0)6192 23398  
E-Mail: info.de@kobold.com  
Internet: www.kobold.com

**Model:**  
NV

**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
- Contact components: 1 N/O contact / N/C contact  
max. charge: 230 V<sub>AC/DC</sub> - 0,18 A  
20 V<sub>AC/DC</sub> - 2 A  
max. capacity: 40 W  
1 SPDT  
max. charge: 150 V<sub>AC/DC</sub> - 0,13 A  
40 V<sub>AC/DC</sub> - 0,5 A  
max. capacity: 20 W
- Electrical connection: 1.5 m cable, PVC
- Contact resistance: max. 80 mΩ
- Closing point: max. 6 mm (above centre line)
- Opening point: max. 3 mm (below centre line)
- Switching hysteresis: approximately 8 mm
- Ex-range: ATEX zone 1 as "simple operator"
- Density: > 0.8 kg/dm<sup>3</sup> to 25 mm float  
> 0.7 kg/dm<sup>3</sup> to 50 mm float
- Protection: IP 65

**Applications**

- Heating boilers
- Car washes
- Cleaning machines

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

Model	Material	Connection/ Length of float	Contact type, PVC cable length
NV-	11=Brass 12=St. steel	01= G ¾; 25 mm 02=M27x1.5; 25 mm 03= G ¾; 50 mm 04=M27x1.5; 50 mm	R1=N/O cont., 1.5 m U1=SPDT, 1.5 m R2=N/O cont., 2.0 m R4=N/O cont., 3.0 m R6=N/O cont., 4.0 m R8=N/O cont., 5.0 m