

## OEM Optical Level Switch



measuring  
•  
monitoring  
•  
analyzing

NSD

- PNP Open Collector Output
- Normally Open or Normally Closed Switch Logic
- Stainless Steel Bodies
- Overcurrent and Reverse Polarity Protected
- LED Status Indicator
- Low Cost and Reliable Optical Sensing Technology
- OEM Targeted Product



KOBOLD companies worldwide:

AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHINA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, RUSSIA, SPAIN, SWITZERLAND, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Instruments, Inc.  
1801 Parkway View Drive  
Pittsburgh, PA 15205  
☎ Main Office:  
1.412.788.2830  
1.412.788.4890  
✉ info@koboldusa.com  
www.koboldusa.com

**Description**

The NSD series optical level switch is a low cost solid-state level sensor suited for clear, translucent, and non-coating low viscosity liquids. The NSD functions by detecting the difference in refraction between the liquid and air. An infrared LED inside the lens transmits a beam of invisible light. In air, the beam is reflected back into the sensing circuit to an infrared detector. In liquid, the beam is refracted away from the detector and results in switch activation or de-activation depending on the switch logic as ordered.

The NSD is available in 316 Stainless Steel with a Polysulfone lens. The switch output is a PNP open collector with normally closed (activated) dry or normally open (de-activated) dry logic, depending on the model code. A red LED status indicator is lit when the switch is activated.



**Specifications**

- Suitable Media:** Low viscosity, clear, translucent, non-coating liquids that are chemically compatible with the selected wetted materials
- Installation Orientation:** Universal
- Material:** 316 Stainless Steel
- Fitting:** 3/8" NPT standard (optional fittings available on request)

**Oper. Temp. Range:** 15°...250 °F

**Max. Pressure:**

**Stainless Steel** 550 PSIG

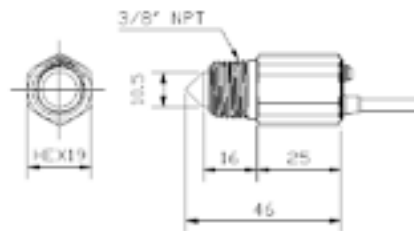
**Power Supply:** 10...28 VDC

**Max. Switch Load:** 100 mA

**Electrical Connection:** 6 Ft. PVC jacketed cable

**Electrical Protection:** NEMA 6/IP68

**Dimensions (mm)**



**Stainless Steel**

Ordering Codes	
<b>NSD-..</b>	= OEM Optical Level Switch
<b>..6..</b>	= 316 Stainless Steel <b>Body Material</b>
<b>..AU..</b>	= 3/8" NPT <b>Process Connection</b> (others available upon request)
<b>..P0</b>	= PNP N/C dry <b>Output</b>
<b>..P1</b>	= PNP N/O dry
<b>NSD- 6 AU P1</b>	Example NSD Order Code

\* Alternate fitting, output, and electrical connection options are available, upon factory consultation.

\*\* 25 piece minimum order quantity for non-standard configurations