# **Magnetic Float Switches**

for Liquids



measuring

monitoring

analyzing

# NCP/NCB/NCS



- Available Materials: Brass, SS, NBR, Polypropylene, and PVC
- Maximum Pressure: 400 PSIGMaximum Temperature: 300 °F
- Single Point Design
- Field Changeable Switch Logic



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:



#### Magnetic Float Switches for Liquids Model NCP/NCB/NCS

Hermetically

reed switch

sealed



## **Description**

KOBOLD float level switches are designed to meet a wide range of applications. They use a hermetically sealed reed contact actuated by a magnet in the float. As the float rises and falls, the magnetic field causes the switch inside the stem to open or close. Our level switches can be mounted in the tank top or bottom and will operate with up to a 30 degree tilt from vertical. They are field selectable for normally open or normally closed. They can also be made intrinsically safe for hazardous application by the use of I.S. barriers, such as our REL-6000. Contact protection relays, such as the RL-Series, should be considered to protect the switch from overload.

## **Switch Ratings for Resistive Loads**

Contact	Switch	Maximum Max.		Current	
Rating	Type	Voltage	AC	DC	
100 VA	SPST	240 VAC/VDC	1.0 A	0.4 A	
20 VA	SPDT	240 VAC/VDC	0.7 A	0.4 A	

# NCP-2554: Top-Mount Polypropylene Switch

- Compact Size, Small Displacement
- Reliable, Yet Inexpensive
- Seamless Construction
- Resistant to Compatible Chemicals

 Max. Pressure:
 100 PSIG

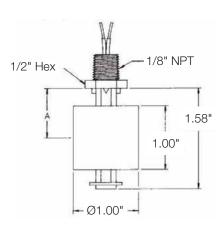
 Op. Temp. Range:
 -40...225 °F

 Fitting:
 1/8" NPT

 Lead:
 22 AWG x 24"

Minimum S.G. of Media: 0.81





Permanent

magnet

Float

# NCP-5094: Side-Mount Polypropylene Switch

- Side-Mount Design for Small Vessels
- Minimal Float Travel and Displacement
- Resistant to Compatible Chemicals

 Max. Pressure:
 40 PSIG

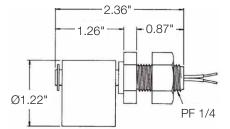
 Op. Temp. Range:
 -40...176 °F

 Fitting:
 PF 1/4" (1/2" x 20)

 Lead:
 22 AWG x 24"

Minimum S.G. of Media: 0.81





#### Order Details: NCP

Туре	Model Number	Stem / Float	Switch
Top Mount	NCP-2554	Polypropylene / Polypropylene	20 VA, SPST
Side Mount	NCP-5094	Polypropylene / Polypropylene	20 VA, SPST

## Magnetic Float Switches for Liquids Models NCP/NCB/NCS



#### NCB-1054 / NCB-1064: Small NBR Switch

- Compact Size, 1" dia. Float
- Precise Repeatability
- Reliable, Great Longevity
- Stem in 316 SS or Brass

Max. Pressure: 150 PSIG

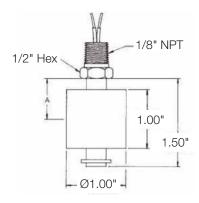
Op. Temp. Range: -40...230 °F (Oil)
-40...180 °F (Water)

 Fitting:
 1/8" NPT

 Lead:
 22 AWG x 24"

Minimum S.G. of Media: 0.55





#### NCB-1000: Intermediate Size NBR Switch

- Reliable
- Inexpensive
- Compact, Narrow Displacement
- Stem in 316 SS or Brass

 Max. Pressure:
 150 PSIG

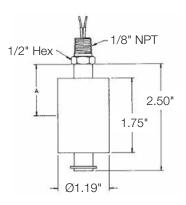
 Op. Temp. Range:
 -40...230 °F (Oil)

 -40...180 °F (Water)

Fitting: 1/8" NPT Lead: 18 AWG x 24"

Minimum S.G. of Media: 0.55





## NCB-5000: Large NBR Switch

- Maximum Displacement for High Viscosity Media
- Rugged Build
- Built for Industrial Service

 Max. Pressure:
 150 PSIG

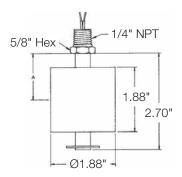
 Op. Temp. Range:
 -40...230 °F (Oil)

-40...180 °F (Water)

**Fitting:** 1/4" NPT **Lead:** 18 AWG x 24"

Minimum S.G. of Media: 0.55





#### **Order Details: NCB**

Type	Float Size	Model Number	Stem / Float	Switch
Top Mount	Small	NCB-1054	316 SS / NBR	20 VA, SPST
Top Mount	Small	NCB-1064	Brass / NBR	20 VA, SPST
Top Mount	Intermediate	NCB-1084	316 SS / NBR	100 VA, SPST
Top Mount	Intermediate	NCB-1094	Brass / NBR	100 VA, SPST
Top Mount	Large	NCB-5124	316 SS/ NBR	100 VA, SPST
Top Mount	Large	NCB-5134	Brass / NBR	100 VA, SPST
Top Mount	Large	NCB-5154	Brass / NBR	20 VA, SPST





## NCS-1074: Small, 316 Stainless Steel Switch

- Compatible with Corrosive Media
- Withstands High Temperatures and Pressures
- Resistant to Shock and Vibration
- Long Operating Life
- Compact Size, 1.1" dia. Float

 Max. Pressure:
 142 PSIG

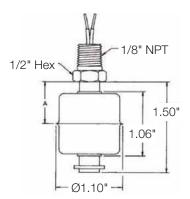
 Op. Temp. Range:
 -4...248 °F

 Fitting:
 1/8" NPT

 Lead:
 22 AWG x 24"

Minimum S.G. of Media: 0.77





# NCS-1104...7202: Large, 316 Stainless Steel Switch

- Compatible with Corrosive Media
- Withstands High Temperatures and Pressures
- Resistant to Shock and Vibration
- Long Operating Life

Max. Pressure:400 PSIGOp. Temp. Range:-40...300 °F

**Fittings:** 1/4" NPT (NCS-1104...7201)

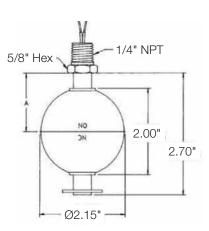
1/2" -13 UNF (NCS-7202)

**Leads:** 18 AWG x 24" (Standard)

18 AWG x 120" (Waterproof)

Minimum S.G. of Media: 0.65





# Order Details: NCS

Size	Type	Model Number	Stem/Float	Switch
Small	Standard	NCS-1074	316 SS / 316 SS	20 VA, SPST
Large	Standard	NCS-1104	316 SS / 316 SS	100 VA, SPST
Large	Waterproof - NPT	NCS-7201	316 SS / 316 SS	20 VA, SPST
Large	Waterproof - UNF	NCS-7202	316 SS / 316 SS	20 VA, SPST



NCS-5161: Side mount, All 316 Stainless Steel Switch NCB-5171: Side mount, 316 SS Stem/NBR Float Switch

- 90° Bend Allows Mounting Where Access To The Tank Top or Bottom is Restricted
- 316 SS Stem is Standard
- Float in SS or NBR
- Long Operating Life

Max. Pressure

**SS:** 275 PSIG (SS) **NBR:** 150 PSIG (NBR)

Op. Temp. Range

**SS:** -40...300 °F

NBR

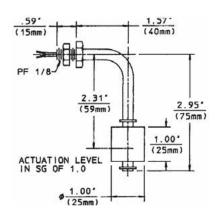
In Oil: -40...230 °F In Water: -40...180 °F Fitting: PF 1/8" (3/8"- 24) Lead: 22 AWG x 11"

Minimum S.G. of Media

**SS:** 0.77 **NBR:** 0.55

## NCB-5171: NBR Float





#### Order Details: NCS-5161, NCB-5171

Туре	Model Number	Stem / Float	Switch
Side Mount	NCS-5161	316 SS / 316 SS	20 VA, SPST
Side Mount	NCB-5171	316 SS / NBR	20 VA, SPST

#### NCS-5161: 316 Stainless Steel Float



