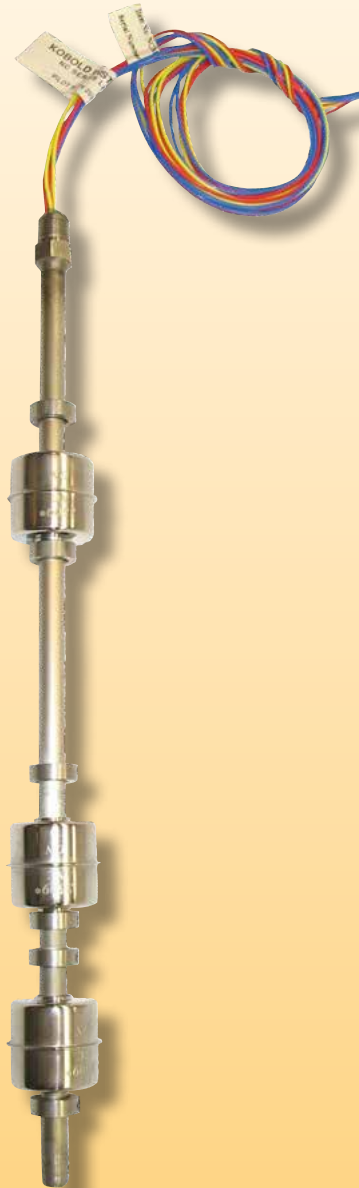


## Miniature Multipoint Level Switches for Liquids



measuring  
•  
monitoring  
•  
analyzing

NCM



- Wide Variety of Material Combinations
- Maximum Pressure: 400 PSIG (SS)
- Stem Lengths up to 48"
- Up to Four Switches Possible
- User-Specified Switch Locations



KOBOLD companies worldwide:

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**Description**

KOBOLD NCM multipoint 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. These custom-manufactured units are available in lengths up to 48 inches with up to four control points in user specified locations.



**Technical Specifications**

**Max. Stem Length:** 48"  
**Stem / Fitting Material:** Brass or 316 SS  
**Float Stop Materials**  
**Brass Units:** Brass  
**SS Units:** 316 SS  
**Electrical Details:** SPST, 100 VA  
**Lead Wires:** 22 AWG, 24" for 1 or 2 Switch Points  
 24 AWG, 24" for 3 Switch Points  
 26 AWG, 24" for 4 Switch Points  
**Float Material:** NBR, SS, or Polypropylene

**Max. Pressure**  
**NBR, Polypropylene:** 150 PSIG  
**Stainless Steel:** 270 or 400 PSIG

**Operating Temperature**  
**NBR in Oil:** -40...225 °F  
**NBR in Water:** -40...180 °F  
**Stainless Steel:** -40...300 °F  
**Polypropylene:** -40...150 °F

**Minimum S.G. of Media**  
**Type 1 Float:** 0.70  
**Type 2 Float:** 0.47  
**Type 3 Float:** 0.60  
**Type 4 Float:** 0.92  
**Type 5 Float:** 0.65

**Fitting Options**

Type 1	Type 2	Type 3	Type 4	Type 5	Type 6
1/8" NPT	1/4" NPT	1" NPT	3/4" NPT	5/16" Tubing	1/2" NPT

**NCM: Miniature Multipoint Level Switches**

- Lengths up to 48"
- Up to Four Switches
- Float Choices of NBR, SS, or Polypropylene
- Stem Choices of 316 SS or Brass

**Float Options**

Type 1	Type 2
316 SS - 270 PSIG	NBR
Type 3	Type 4
Polypropylene	316 SS - 400 PSIG
Type 5	
NBR	



**NCM Order Details:** (Example: **NCM-3132N**)

Model	Fitting Type	Fitting / Stem Material	Number of Switch Levels	Float Type and Material	Options
NCM-	..1.. = 1/8" NPT, Male	..1.. = Brass / Brass ..2.. = SS / SS	..1.. = 1 Switch Level ..2.. = 2 Switch Levels ..3.. = 3 Switch Levels ..4.. = 4 Switch Levels	..1 = 316 SS ..2 = NBR ..3 = Polypropylene ..4 = 316 SS (Narrow version for fitting type 4) ..5 = NBR (Narrow version for fitting type 4)	..N = Alum. Junction Box (NEMA 4) (Fitting Types 3 and 4) ..NT = Alum. Junction Box with Terminal Strip (NEMA 4) (Fitting Types 3 and 4)
	..2.. = 1/4" NPT, Male				
	..3.. = 1" NPT, Male with 1/2" NPT Conduit				
	..4.. = 3/4" NPT, Male with 1/2" NPT Conduit				
	..5.. = 5/16" Tube End				
	..6.. = 1/2" NPT, Male				

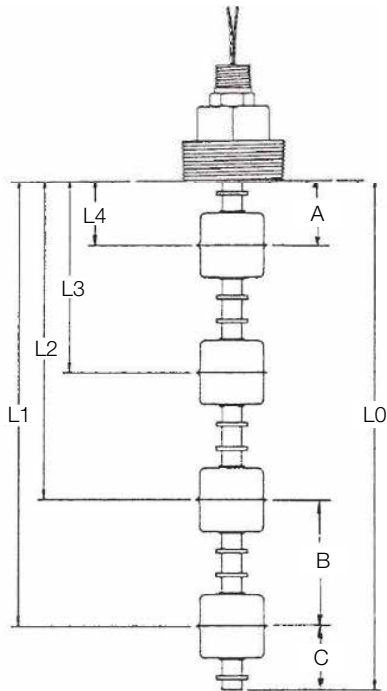
**NCM Order Details: Other Considerations**

Please Provide:

- Full Part Number Using the 'Order Details' Table
- Completed 'Actuation Point Locations and Logic' Table Below
- Completed 'Application Information' Table Below

Please Note:

- Switch Operation Assumes Float is Dry (Empty Tank)
- Standard Lead Wires are 24" with 22, 24, or 26 AWG



**Switch Geometry**

A = 3/4" minimum distance to highest level  
 B = 1-3/4" minimum distance between levels  
 C = 1" minimum distance from the end of the unit to the lowest level, except float type 4 & 5 which requires a 2" minimum.

Application Information	
<b>Process Liquid:</b>	
Name: _____	S.G.: _____ Visc: _____
<b>Temperature:</b>	
Min: _____	Operating: _____ Max: _____
<b>Pressure:</b>	
Operating: _____	Max: _____

Actuation Point Location and Logic		
Distance (Minimum of 1-3/4" Between Levels)	SPST Switch Operation	
L0: _____	L0 = L1 + 1" for float type 1, 2, or 3 L1 + 2" for float type 4 or 5	
L1: _____	<input type="checkbox"/> N/O Dry	<input type="checkbox"/> N/C Dry
L2: _____	<input type="checkbox"/> N/O Dry	<input type="checkbox"/> N/C Dry
L3: _____	<input type="checkbox"/> N/O Dry	<input type="checkbox"/> N/C Dry
L4: _____	<input type="checkbox"/> N/O Dry	<input type="checkbox"/> N/C Dry