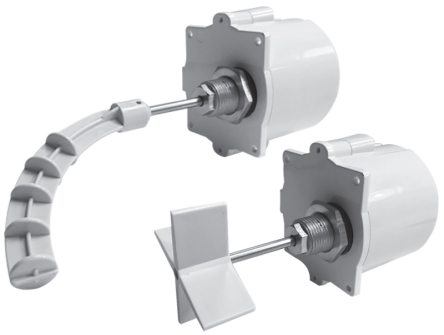
LM-001N/LM-002-SERIES

LEVEL PADDLE SWITCH

PRIMUS



LM-001N-SERIES



LM-002-SERIES

Specification

Model		LM-001N	LM-001N-1	LM-001N-S	LM-002	LM-002-S
Power Supply		220VAC/50-60Hz			220VAC/50Hz	
Power Consumption		1.5VA			2 VA	
Speed Round		0.8RPM 50Hz			0.8RPM 50Hz	
		1.0RPM 60Hz				
Core Length	Standard	100	200	164	150	
	Special Max	500	500	500	1000	
Thread (mm.)		Ø25	Ø25	Ø25	Ø47	
Output	1 Output	Relay Contact 5A 250VAC				
Ambient Operation	Temperature	-10°C to 60°C				
	Humidity	85% RH Non-Condensing				
Ambient Storage	Temperature	-20°C to 80°C				
	Humidity	85% RH Non-Condensing				
Protection Degree	Front Protection Rating	IP52				
	Case Protection Rating	IP30				
Installation		Screw				
Material	Housing	Aluminium and Stainless				
	Filter Head	Plastic			Aluminium	
Size (mm.)		180.50 x Ø95.60	280.50 x Ø95.60	244.60 x Ø95.60	220 x 160	
Weigth (kg.)		652	652	655	1485.6	

Application

- The LM-001 Series is suitable for light-load applications, such as plastic pellet hoppers of injection molding machines.
- LM-002 Series is suitable for heavy-duty applications, such as silo tanks in industrial plants.

Description

- Level Paddle Switch: LM-001N, LM-002 Series Paddle-type level switches for detecting the level of solid or powder materials such as paddy rice, rice grains, seeds, flour, plastic pellets, etc.
- Supply voltage: 220 VAC, 50–60 Hz.
- Relay output contact: 5 A, 250 VAC.
- Threaded mounting
  - LM-001N: Ø25.6 mm (3/4 inch).
  - LM-002 / LM-002-S: Ø47.0 mm.
- Shaft length including paddle can be specified
  - LM-001N: 100–500 mm.
  - LM-002: 150–1,000 mm.
- Operating temperature range: –10 to 60 °C.

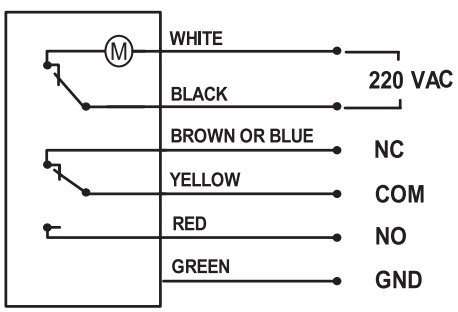
Operation

LM Series is a paddle-type level switch for detecting the level of solid or powder materials in silos, such as paddy rice, milled rice, seeds, flour, or plastic pellets. It is used to monitor and control the level to the desired range and can be installed on either the top or the side of the tank.

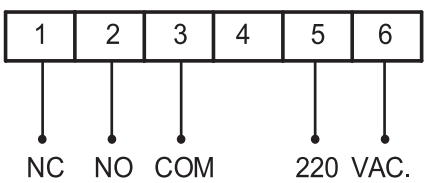
When power is applied, the paddle of the LM Series rotates at a speed of 0.8 rpm (at 50 Hz). If no material contacts the paddle, it continues to rotate. When the material level inside the tank rises to the point where the LM Series is installed and contacts the paddle, the paddle stops rotating and activates the relay output. This output can be connected to various control devices such as PLCs, relay modules, magnetic contactors, or other control systems to stop or start the material filling process in the tank.

Wiring Diagram

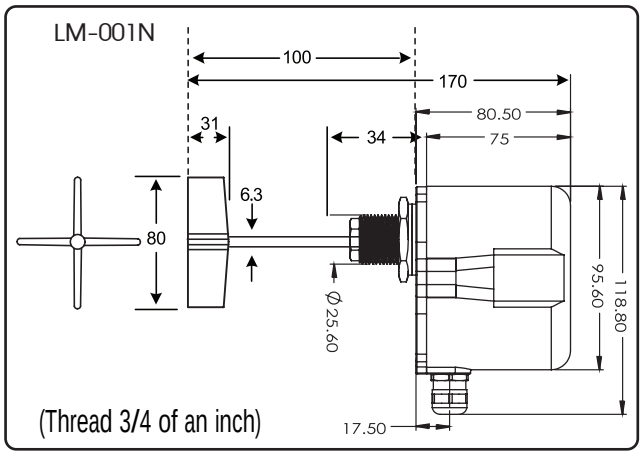
LM-001N, LM-001N-1, LM-001N-S

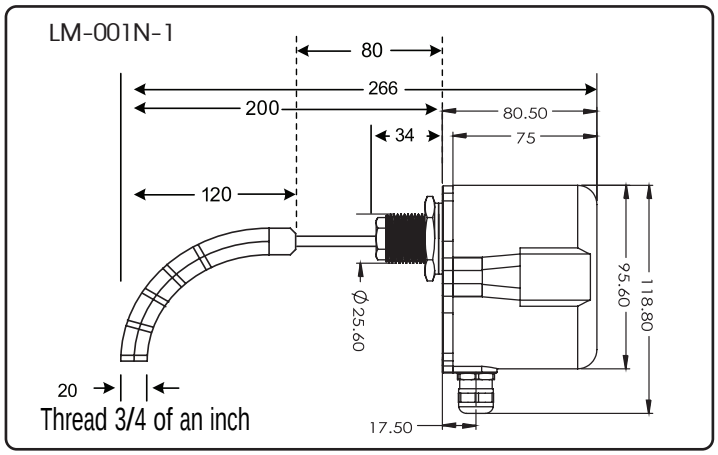


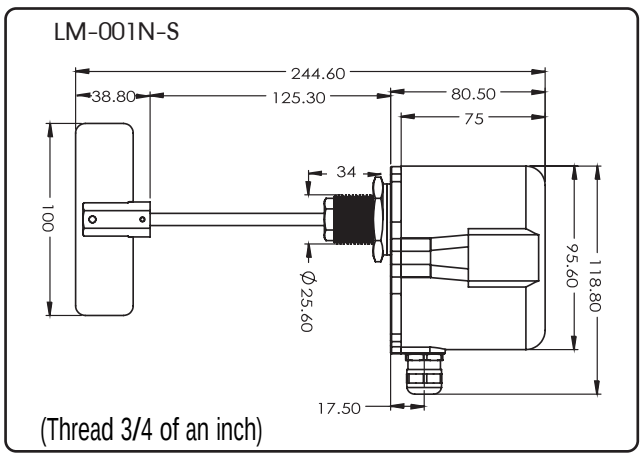
LM-002/LM-002-S

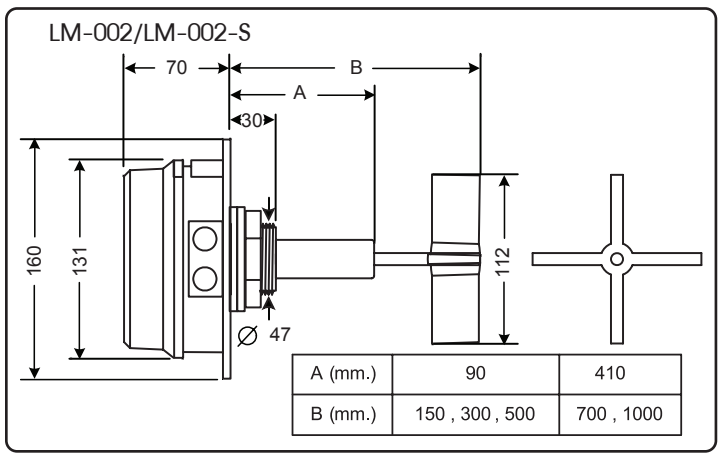


Dimension and shape



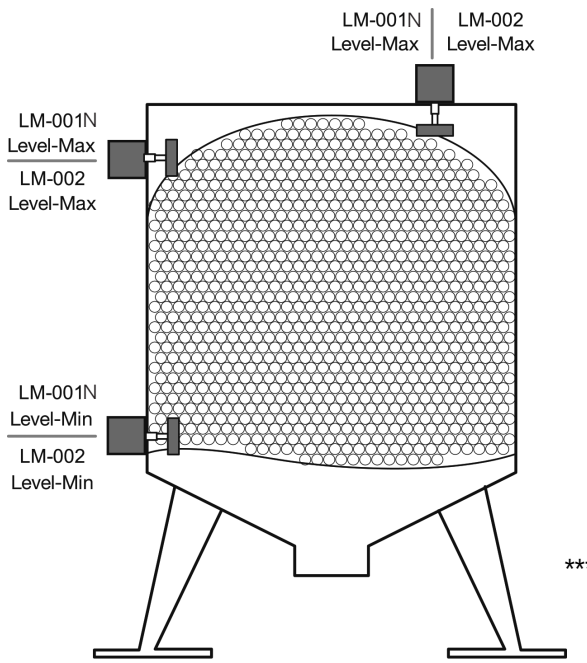






A (mm.)	90	410
B (mm.)	150 , 300 , 500	700 , 1000

Installation and usage



Ordering Code

LM- [ ] [ ]

Paddle Type	
001N	Plastic paddle
001N-1	Plastic ring paddle
001N-S	Stainless steel paddle
002	Aluminum paddle
002-S	Stainless steel paddle

Shaft length including paddle	
100 mm.	Length 100 mm.
200 mm.	Length 200 mm.
300 mm.	Length 300 mm.
Up to 1000 mm.	MaximumLength 1000 mm.

***Standard shaft length including paddle

- LM-001N The standard shaft length including the paddle is 100 mm, and the maximum orderable length is 500 mm.
- LM-001N-1 The standard shaft length including the paddle is 200 mm, and the maximum orderable length is 500 mm.
- LM-001N-S The standard shaft length including the paddle is 124 mm, and the maximum orderable length is 500 mm.
- LM-002 The standard shaft length including the paddle is 150 mm, and the maximum orderable length is 1000 mm.
- LM-002-S The standard shaft length including the paddle is 150 mm, and the maximum orderable length is 1000 mm.