



HNL50-A

RF ADMITTANCE SWITCH

HNL50-A MAIN PARAMETERS

Liquid level type: RF admittance

Range of measurement: 0-3000mm Refer to the selection table for details

Output signal: Relay

Measurement medium: Liquid, slurry, dust, material level, and boundary between two liquids

Application scenarios: Suitable for various places

Authentication: 

PRODUCT INTRODUCTION

The HNL50-A RF admittance level switch consists of a sensor unit and an electronic unit. The sensor unit mainly includes three parts: measuring probe, shielding electrode, and grounding terminal.

The height of the material is reflected by the change in admittance between the probe and the container wall. When the material reaches the switch working point, the electronic unit reacts, drives the relay to act, and outputs the switch signal. Shielding electrodes can prevent misoperation signals caused by hanging materials on the electrodes, and only output switch control signals when the materials truly reach the set point.

PRODUCT FEATURES

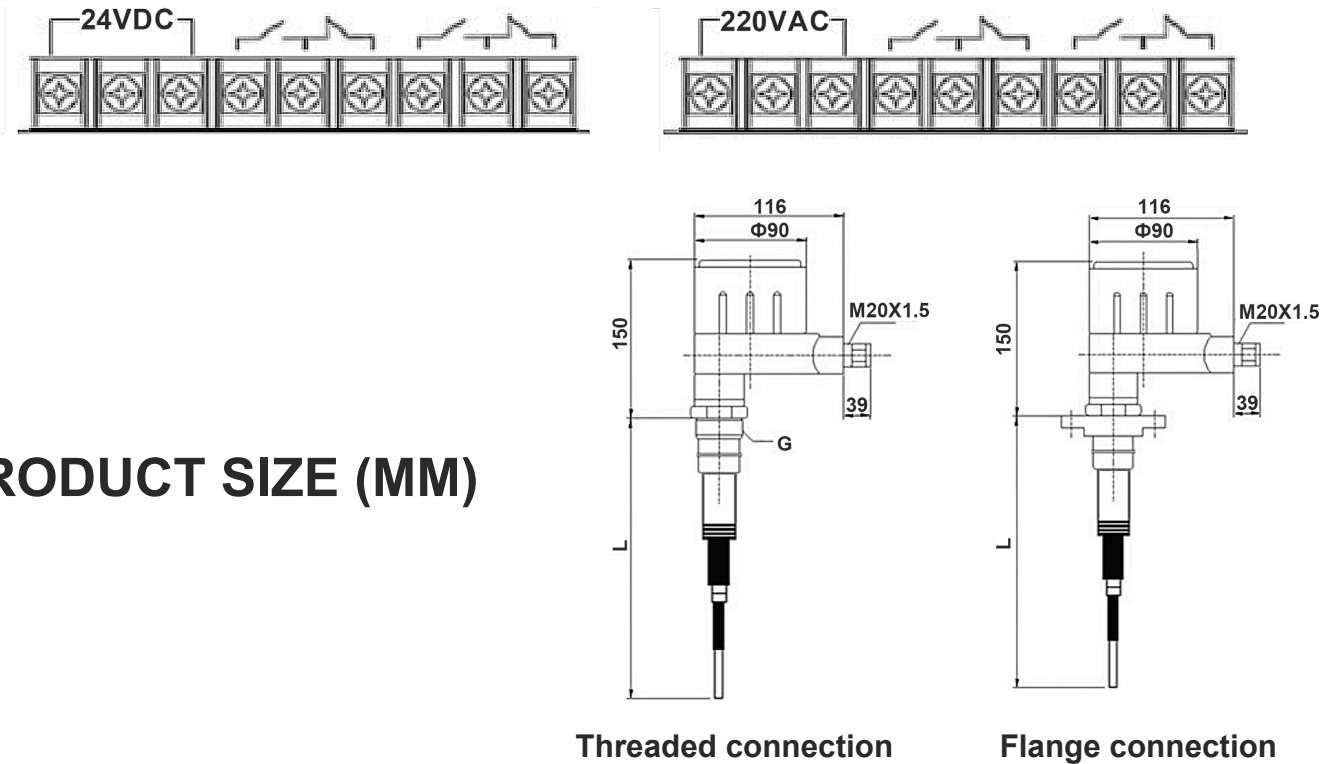
- 1 The conductivity of the medium and temperature have little effect on the capacitance. Has high anti-interference and stability
- 2 Capable of measuring highly corrosive liquids and solid particles
- 3 No mechanical transmission structure, not easily worn, easy to install, suitable for various places
- 4 Reliable switch action, with on-site working status indication, easy to observe, adjustable sensitivity
- 5 High temperature and high pressure type can be applied in situations with 800°C/atmospheric pressure and 25°C/10Mpa
- 6 Suitable for liquid (substance) level monitoring and alarm of various tanks, widely used for alarm and control of liquids, slurries, dust, material levels, and the boundary between two liquids

TECHNICAL PARAMETER

NAME		SPECIFICATION	
Repeatability	Switch type	<1mm (conductive medium)	
		<10mm (insulation medium)	
Response time	0.2s when covered by medium (response time adjustable 0.2...60s)		
Maximum switching efficiency	150 times/min		
Number of switching points	1 unit		
Permissible operating pressure	Standard type: -0.1 to 2.5 MPa; High-pressure type: 25°C/5 MPa		
Media density	>0.5 g/cm³ (measured medium solid particles less than 10 mm in diameter)		
Lifespan	>1 million times		
Signal output	Relay (DPDT)		
Supply voltage	24Vdc/220Vac		
Current	5A		
Operating Temperature Range	Standard Model: -20°C to 180°C High-Temperature Split Model: 800°C/normal pressure		
Transport/storage temperature range	-40-80°C		
Vibration stability	Sine: 20 g, 25 Hz – 2 kHz	IEC 68-2-6	
	Sine: Piston type 4.4 g, 25-200	IEC 60068-2-27	

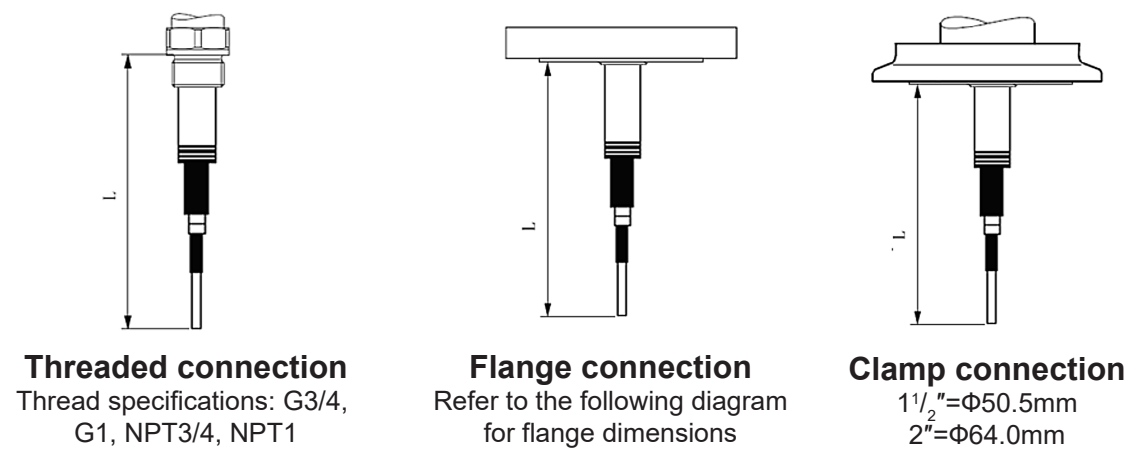
Impact resistance	Impact resistance: 50 g/6ms	IEC 60068-2-27
	Free fall: 1 meter	IEC 60068-2-32
Protection level	IP65,IEC 529	
Explosion-proof grade	Exd IICT6	
Electrical connections	Terminal Blocks	
Mechanical connections	Threaded, Flange, Clamp	
Wetted parts material	304/316	
Casing material	Aluminum	
Weight	3.5kg	

ELECTRICAL CONNECTION



PRODUCT SIZE (MM)

SPECIFIC PROCESS CONNECTION METHOD



FLANGE SIZE SPECIFICATIONS

Flange size mm				Bolt hole			Insertion depth
Nominal flange size	Outer diameter of flange D	B	Sealing surface C	Number n	Diameter d (mm)	Center distance of screw hole D1 (mm)	Insertion depth L (mm)
2"(150LB)	152	---	92	4	19	121	---
2"(300LB)	165	---	92	4	19	127	---
3"(150LB)	190	65.5	127	4	19	152	---
3"(300LB)	210	65.5	127	8	22	168.5	---
4"(150LB)	228	89	157	8	19	190	---
4"(300LB)	254	89	157	8	22	200	---
DN50(PN2.5/40)	165	---	92	4	18	125	---
DN80(PN2.5/40)	200	65.5	127	8	18	160	---
DN100(PN2.5/40)	235	89	157	8	22	190	---

HNL50-A RF ADMITTANCE SWITCH SELECTION TABLE

MODEL	SPECS	PARAMETER
Product type	00	Standard (integrated)
	01	Split type
Voltage reference	A	Voltage resistance: -0.1~2.5Mpa
	B	Pressure resistance: 25°C/5MPa
Measuring range	10	0.....250mm
	11	0.....300mm
	12	0.....350mm
	13	0.....400mm
	14	0.....500mm
	15	0.....1000mm
	16	0.....1500mm
	17	0.....2000mm

Measuring range	18	0.....2500mm
	19	0.....3000mm
	X	Specially customized range, write the range directly after x
Supply voltage	A	DC 24VDC
	B	Exchange 220VAC
Signal output	1	Relay output
Process threaded connection	A01	G3/4 (external thread)
	A02	G1 (external thread)
	A03	NPT3/4 (external thread)
	A04	NPT1 (external thread)
	A05	1-1/2 "(clamp connection)
	A06	2 "(clamp connection)
	A07	Flange DN50
	A08	Flange DN80
	A09	Flange 2"
	A10	Flange 3"
	X	Special customization
Signal output	1	Terminal wiring
Temperature range	1	Standard type: -20~180°C
	2	High temperature type: 800°C
Is it explosion-proof	1	Non explosion proof type
	2	Intrinsic safety explosion-proof type