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FLOAT TYPE LEVEL SWITCH

HM-95 Series











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Overview

HM-95 Series is a Float Type Level Switch which detects liquid level by using of float and is mainly applied for high temperature and pressure vessel such as Boiler drum, Petrochemical Industry and Power plant, etc. It is used for the process performing alarm function when filling and discharging of the tank. Weather Proof and Ex-Proof version are available in accordance with requirement of site.

Characteristics

- Widely used to detect various liquid levels
- Strong structure and long life cycle
- Applicable to high temperature and pressure
- Easy installation
- Applicable to explosion area (Ex-Proof version)

Operating Principle

When liquid level rises, the core connected to the float is also rising. The movement of core produces the contact output signal (SPDT or DPDT) by switching mechanism.

LOW ALARM N.C N.O **Pivot** Sealing Tube Iron Core Bias Spring Magnet Float **Falling Level**

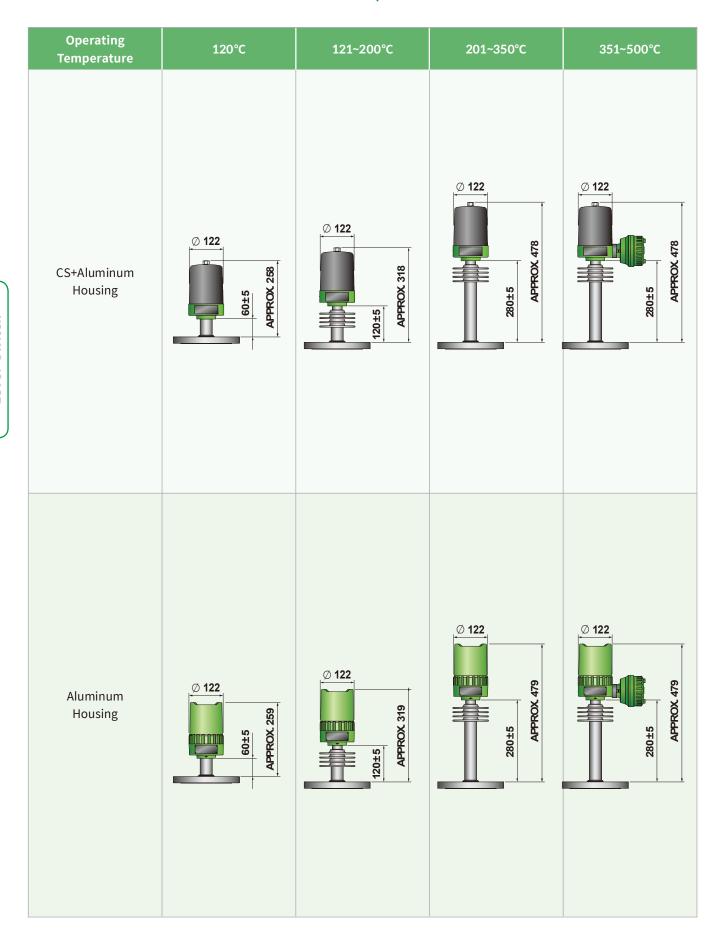
HIGH ALARM N.C N.O Rising Level

Specification

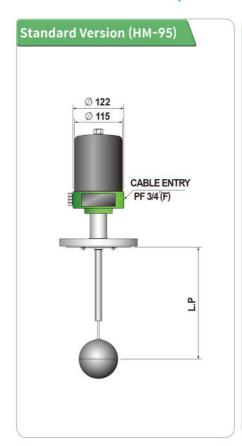
Model	HM-95	HM-95-Ex	НМ-95Н	HM-95H-Ex		
Mounting	Flange (std.)					
Installation	Тор					
Switch Type	Micro Switch					
Contact Rating			AC 250V 15A, DC 125V 0.5A (Max. 200°C)			
	AC 250V 15A, DC 125V 0.5A		AC 250V 5A, DC 125V 0.5A (Max. 350°C)			
			AC 250V 1A, DC 125V 0.4A (Max. 500°C)	-		
Output	1-SPDT / DPDT					
Wetted Part Material	SUS 316L					
Process Connection	100A JIS 10K RF / SUS304 (std.)					
Enclosure	Weather Proof (IP65)	Ex-Proof (Ex d IIC T4, IP65)	Weather Proof (IP65)	Ex-Proof (Ex d IIC T4, IP65)		
Process Pressure	10kg/cm² ~ 63kg/cm² (900#)					
Process Temperature	Max. 120°C		Max. 500°C	Max. 350°C		
Housing Material	C.S + Aluminum (std.)	Aluminum	C.S + Aluminum (std.)	Aluminum		
Conduit Connection	PF 3/4"(F) (std.)					
Length	300mm (std.)					
Specific Gravity	Float ø94 → more than 0.9 (std.)					
	Float ø114 → more than 0.5					

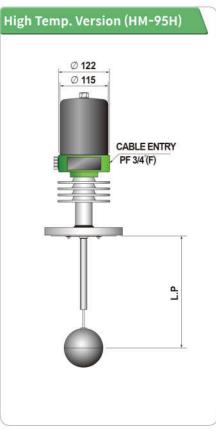
Model	HM-95V	HM-95V-Ex	HM-95VH	HM-95VH-Ex	
Mounting	Socket Weld (std.)				
Installation	Top and Bottom (std.)				
Switch Type	Micro Switch				
Contact Rating	AC 250V 15A, DC 125V 0.5A		AC 250V 15A, DC 125V 0.5A (Max. 200°C)		
			AC 250V 5A, DC 125V 0.5A (Max. 350°C)		
			AC 250V 1A, DC 125V 0.4A (Max. 500°C)	-	
Output	1-SPDT / DPDT				
Wetted Part Material	SUS 316L				
Process Connection	SW 1" / CS (std.)				
Enclosure	Weather Proof (IP65)	Ex-Proof (Ex d IIC T4, IP65)	Weather Proof (IP65)	Ex-Proof (Ex d IIC T4, IP65)	
Process Pressure	Up to 105kg/cm² (1500#)				
Process Temperature	Max. 120°C		Max. 500°C	Max. 350°C	
Housing Material	C.S + Aluminum (std.)	Aluminum	C.S + Aluminum (std.)	Aluminum	
Conduit Connection	PF 3/4"(F) (std.)				
Specific Gravity	more than 0.8				

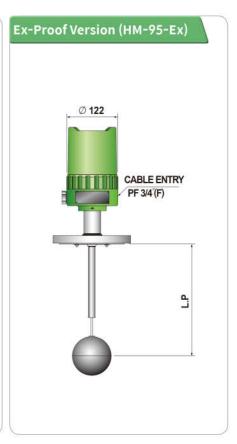
Dimension of Housing as per Temperature

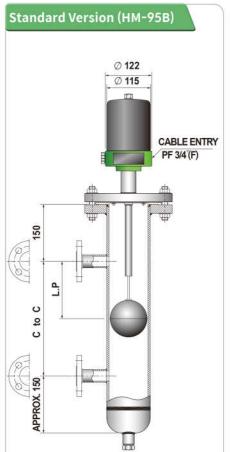


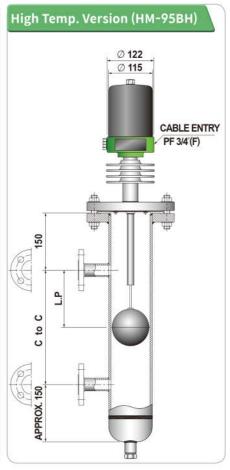
Dimension

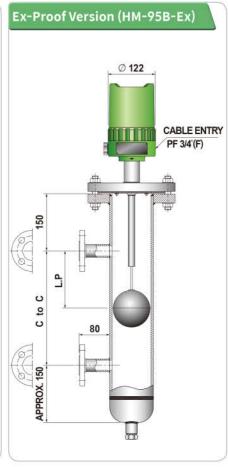






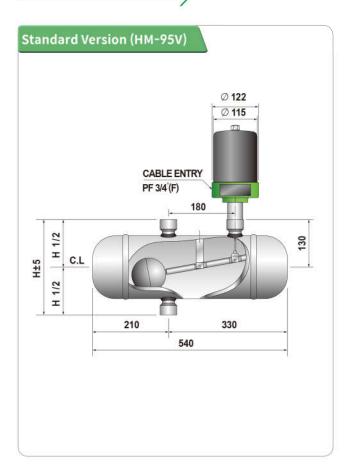


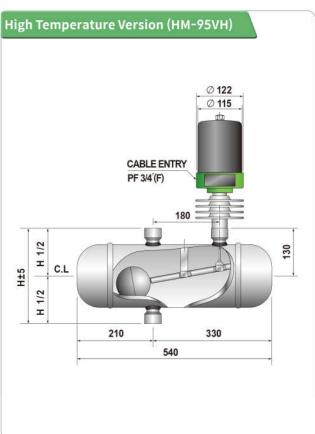


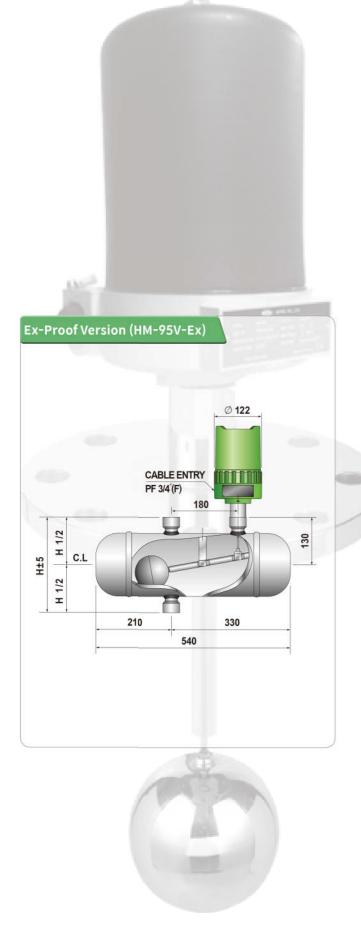


Actual product may have a tolerance slightly.

Dimension



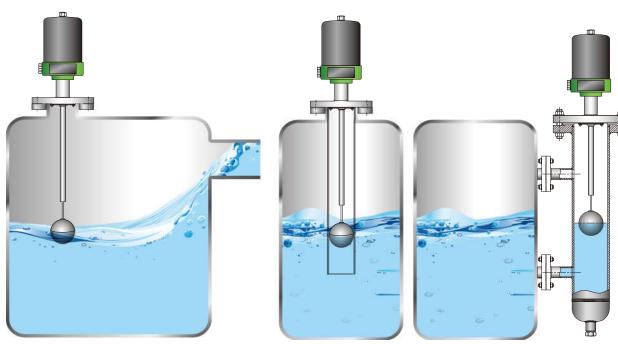




Actual product may have a tolerance slightly.

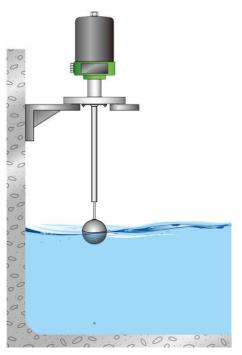
Installation

■ Below recommendation should be considered when installation.

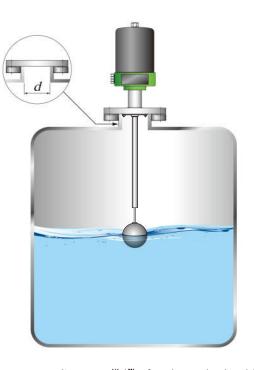


Product should be installed at the place far from inlet in order to avoid the malfunction.

Protection tube or external chamber should be applied if there is a flow or slopping of the medium in the tank.



Bracket should be installed with the product when the installation on the concrete as per above figure.



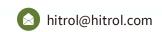
Inner diameter ("d") of tank nozzle should be larger than the outer diameter of float as per above figure.



Easy installation

Applicable to various liquids

Strong structure and long life cycle





* Design of product can be changed for upgrade without notice.