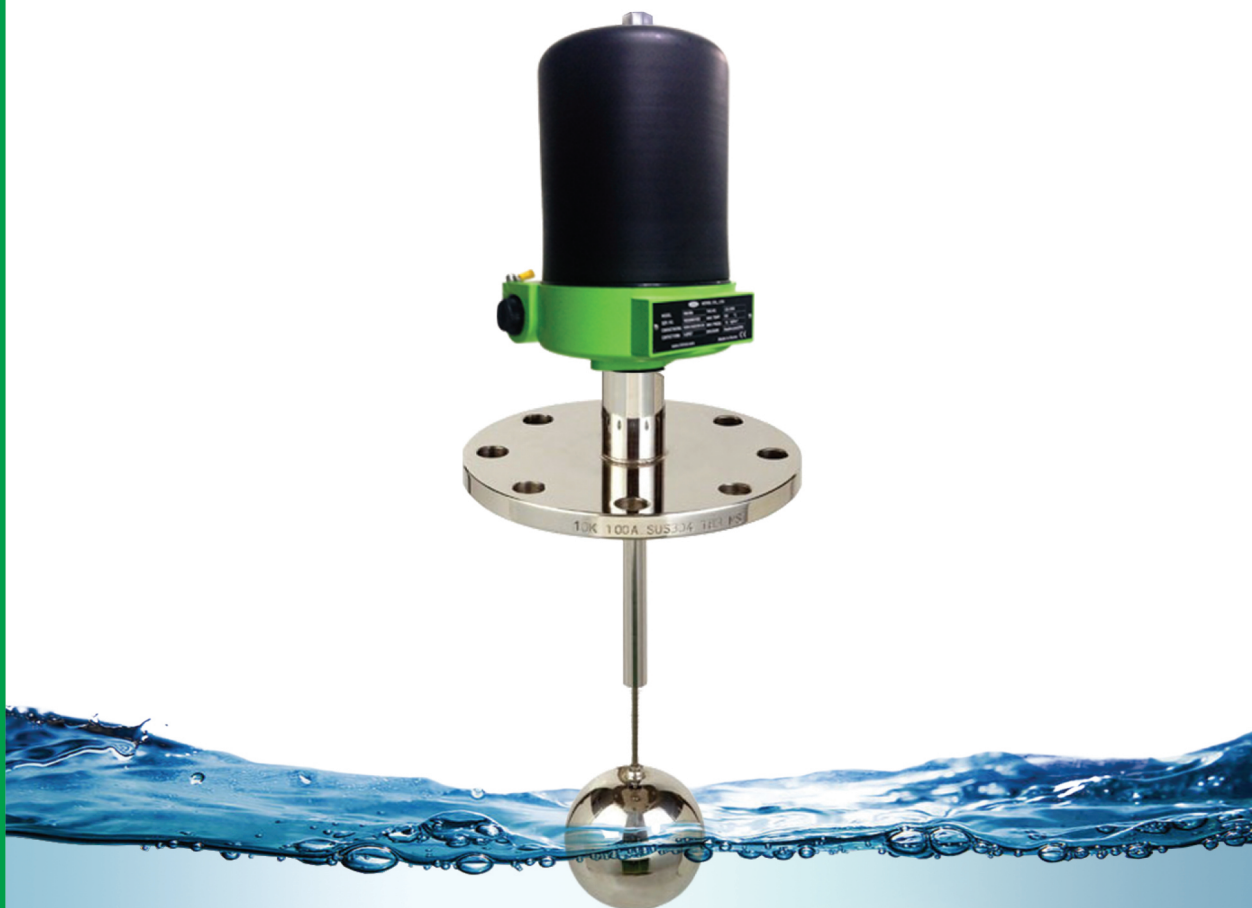


FLOAT TYPE LEVEL SWITCH

HIM-95 Series



2 YEARS WARRANTY



ASME



www.hitrol.com



Always The Best Solution

HITROL CO., LTD.

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.

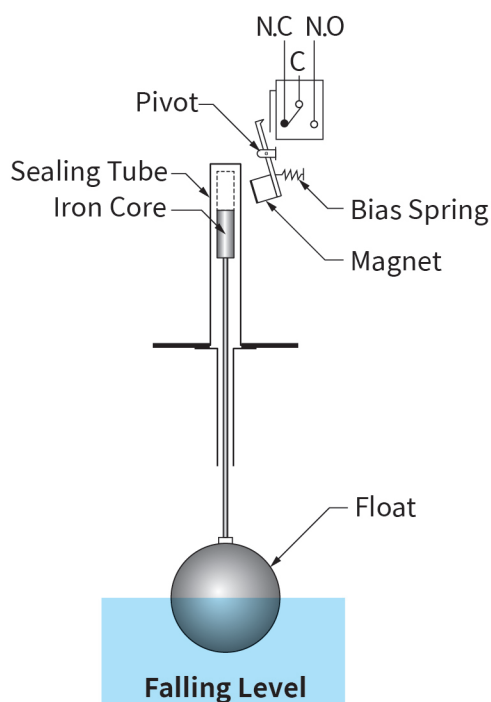
Characteristics

- 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)

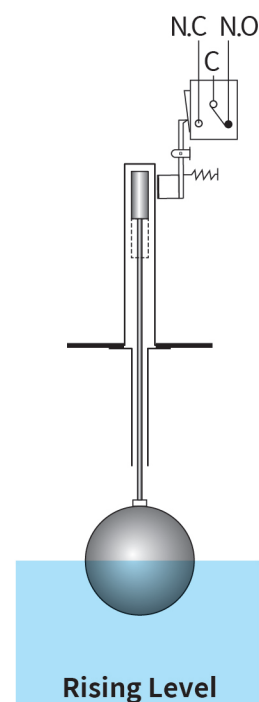
Operation Principle

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



HIGH ALARM



FLOAT TYPE LEVEL SWITCH
HM-95 Series

Specification

Model	HM-95	HM-95-Ex	HM-95H	HM-95H-Ex
Mounting	Flange (std.)			
Installation	Top			
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 5A, DC 125V 0.5A (Max. 300°C)	
		AC 250V 1A, DC 125V 0.4A (Max. 500°C)	AC 250V 5A, DC 125V 0.5A (Max. 350°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/cm ² ~ 63kg/cm ² (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 Ø90→more than 0.9 (std.)			
	Float Ø110→more than 0.8			

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 5A, DC 125V 0.5A (Max. 300°C)	
		AC 250V 1A, DC 125V 0.4A (Max. 500°C)	AC 250V 5A, DC 125V 0.5A (Max. 350°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/cm ² (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			

► **Order Code** can be printed at our website (www.hitrol.com)

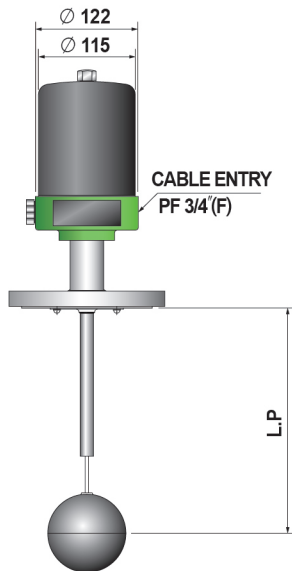
Dimension of Housing as per Temperature

Level Switch

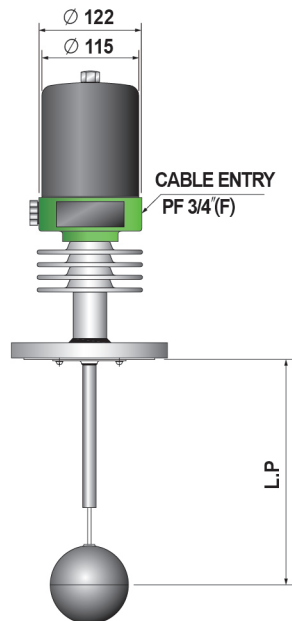
Operating Temperature	120°C	121~200°C	201~350°C	351~500°C
CS+Aluminum Housing	<p> $\varnothing 122$ 60 ± 5 APPROX. 258 </p>	<p> $\varnothing 122$ 120 ± 5 APPROX. 318 </p>	<p> $\varnothing 122$ 280 ± 5 APPROX. 478 </p>	<p> $\varnothing 122$ 280 ± 5 APPROX. 478 </p>
Aluminum Housing	<p> $\varnothing 122$ 60 ± 5 APPROX. 259 </p>	<p> $\varnothing 122$ 120 ± 5 APPROX. 319 </p>	<p> $\varnothing 122$ 280 ± 5 APPROX. 479 </p>	<p> $\varnothing 122$ 280 ± 5 APPROX. 479 </p>

Dimension

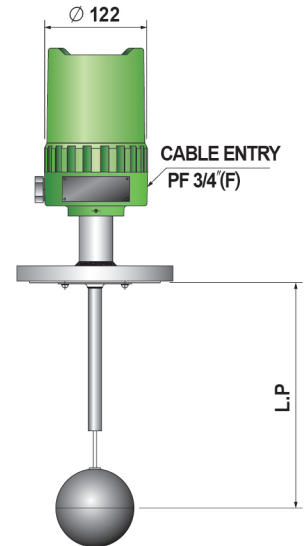
Standard Version (HM-95)



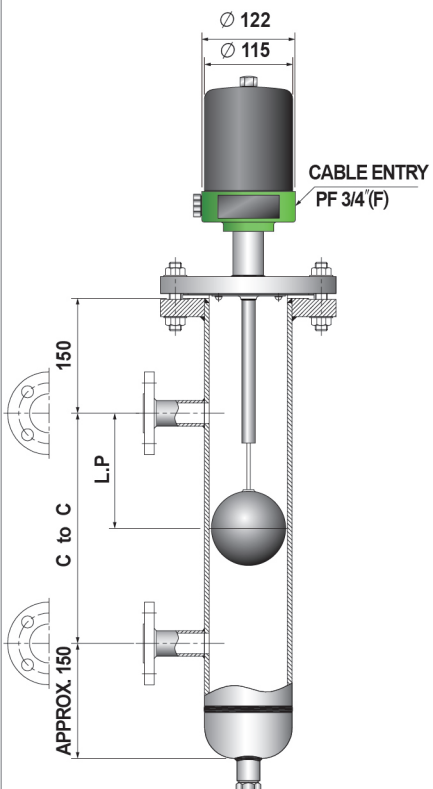
High Temp. Version (HM-95H)



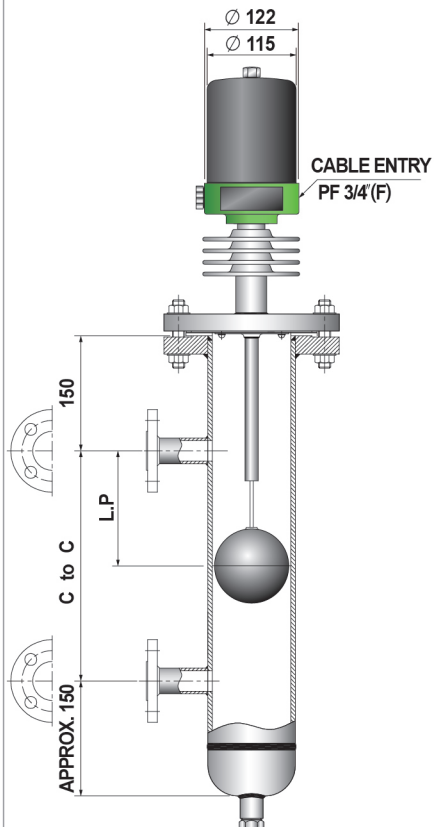
Ex-Proof Version (HM-95-Ex)



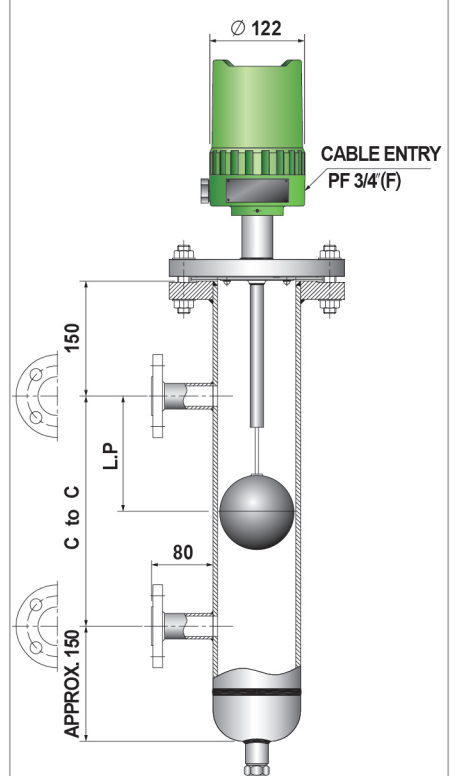
Standard Version (HM-95B)



High Temp. Version (HM-95HB)



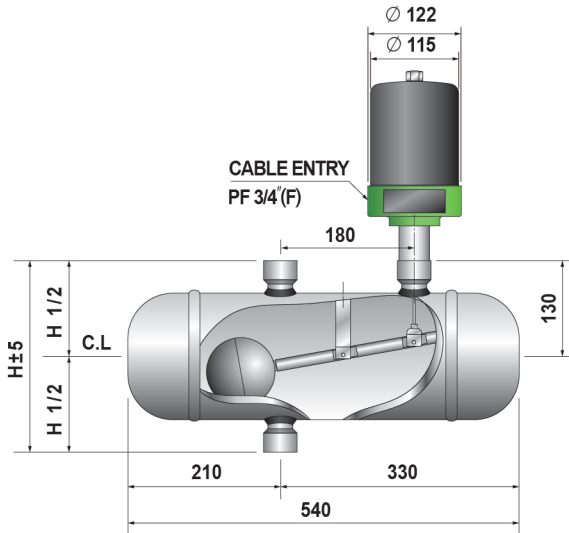
Ex-Proof Version (HM-95B-Ex)



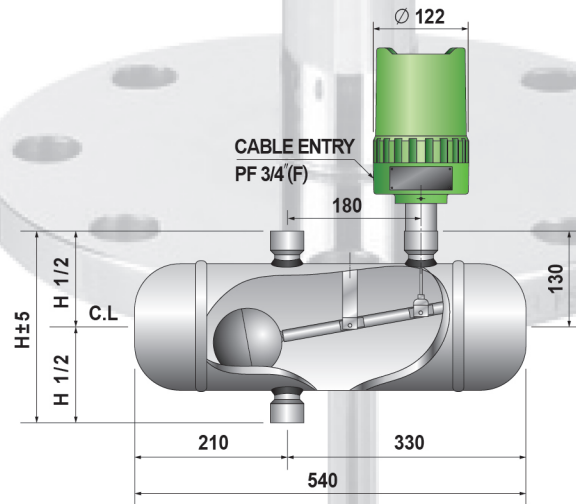
■ Actual product may have a tolerance slightly.

Dimension

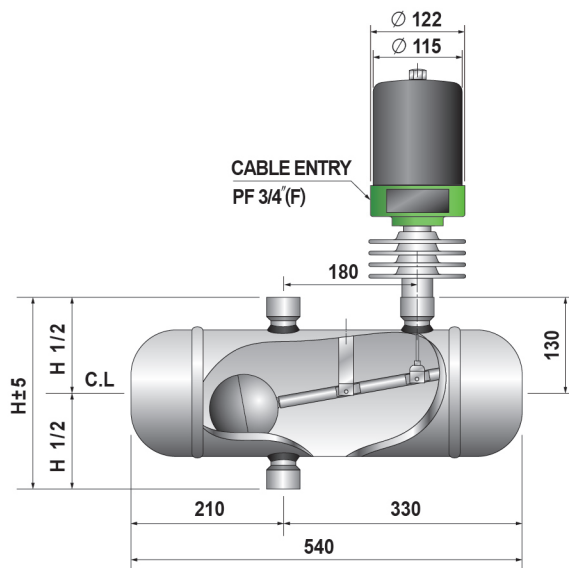
Standard Version (HM-95V)



Ex-Proof Version (HM-95V-Ex)



High Temperature Version (HM-95VH)



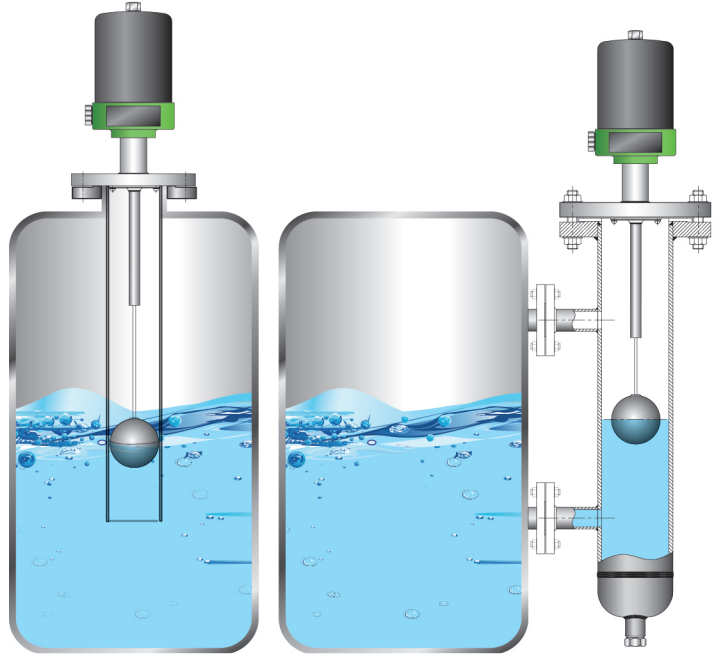
■ Actual product may have a tolerance slightly.

Installation

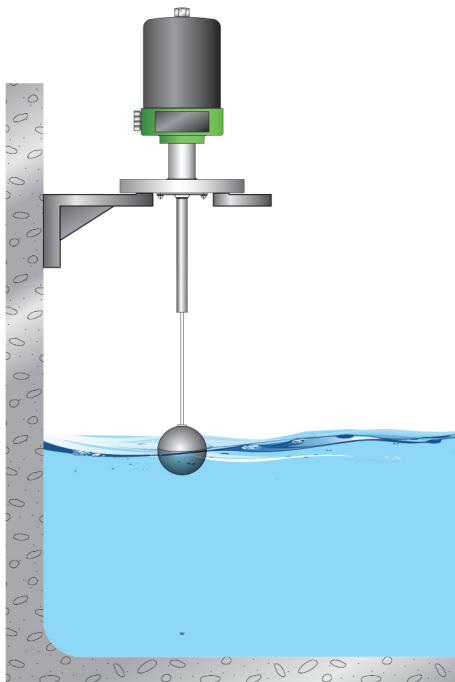
- Below recommendation should be considered when installation.



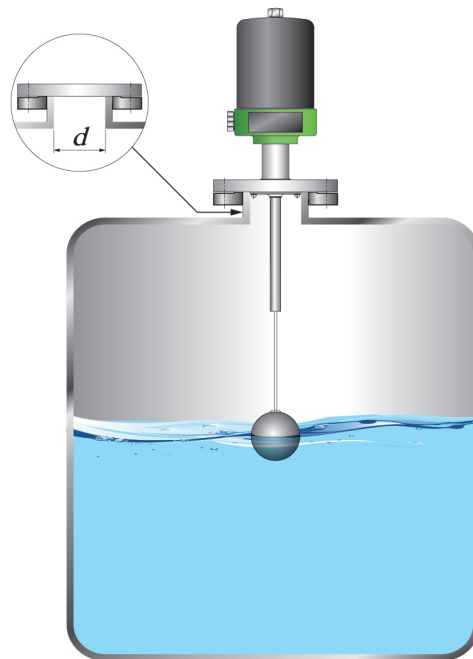
Product should be installed at the place far from inlet in order to avoid the malfunction.



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



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

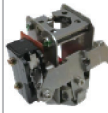

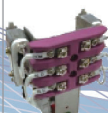
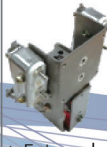


Inner diameter ("d") of tank nozzle should be larger than the outer diameter of float as per above figure.

FLOAT TYPE LEVEL SWITCH

HM-95 Series

- 01 Applicable to high temperature and pressure vessel
- 02 Applicable to various liquids
- 03 Strong structure and long life cycle
- 04 **TERMINAL BLOCK is different depending on the temperature(OPT. CERAMIC TERMINAL BLOCK)**

Std. Type	Opt. Type	Process Temperature	Contact Rating
		~ 200°C	AC 250V, 15A DC 125V, 0.5A
		~ 350°C	AC 250V, 5A DC 125V, 0.5A
Std. Type	Opt. Type	Process Temperature	Contact Rating
	 + External terminal block	~ 500°C	AC 250V, 1A DC 125V, 0.4A

 hitrol@hitrol.com

 www.hitrol.com

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