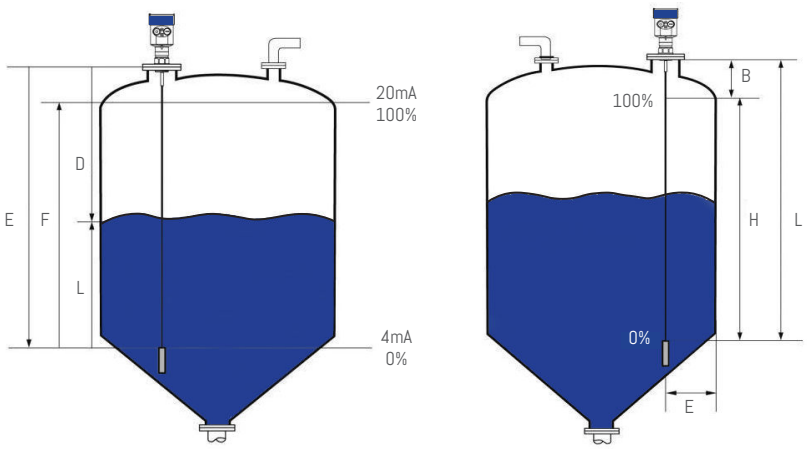
Guide Wave Radar Level Meter

Reflected pulse signal along the cable or rod probe type transmit to the instrument electronic circuit parts, the microprocessor processes the signal, identify the microwave pulse echo generated in the material surface. Correct identification of the echo signal are completed the implementation by the pulse software

D, the distance from the material surface and the pulse travel time T is proportional: D=C×T/2. Where C is the speed of light. Because the empty distance E is known, the level L is: L=E-D. By entering the empty height of E (= zero), full tank height F (= hundred) and the application to set some parameters, application parameters will automatically adapt the instrument to measure the environment, corresponding to the 4-20mA output.

Measuring range

H--- Measuring range
L---Empty distance
B---The top of the blind
E---The minimum distance from the probe to the tank wall



Blind spot is the minimum distance between the top of the highest material surface materials and measurement reference point. The bottom of the blind refers to a distance near the very bottom of the cable can not be accurately measured. Between the top and bottom of the blind is blind effective measure distances.

Model Line Up

GWLM-31	
Applicable Medium	Liquid and solid powder
Explosion-proof Grade	Exib IIC T6 Gb/Exd IIC T6 Gb
Measuring Range	30 meters
Frequency	500MHz-1.8GHz
Temperature	-40 °C to 250 °C
Measurement Precision	±10 mm
Process Pressure	-0.1 to 4 MPa
Output Signal	4- 20 mA/HART (Two wire/Four)
The Scene Display	Four Digits LCD Display
Shell Material	Aluminum
Connection	Flange(optional)/ Thread
Protection Grade	IP67

GWLM-32	
Applicable Medium	Liquid, especially corrosive liquids (Acid)
Explosion-proof Grade	Exib IIC T6 Gb/Exd IIC T6 Gb
Measuring Range	20 meters
Frequency	500MHz-1.8GHz
Temperature	-40 °C to 250 °C
Measurement Precision	±10 mm
Process Pressure	-0.1 to 4.0 MPa
Output Signal	4- 20 mA/HART (Two wire/Four)
The Scene Display	Four Digits LCD Display
Shell Material	Aluminum
Connection	Flange(optional)/ Thread
Protection Grade	IP67

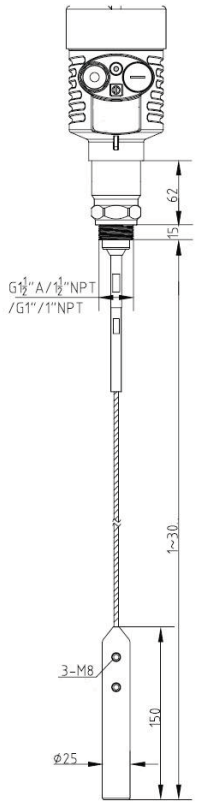
GWLM-33	
Applicable Medium	Solid powder
Explosion-proof Grade	Exib IIC T6 Gb/Exd IIC T6 Gb
Measuring Range	30 meters
Frequency	500MHz-1.8GHz
Temperature	-40 °C to 150 °C
Measurement Precision	±10 mm
Process Pressure	-0.1 to 4 MPa
Output Signal	4- 20 mA/HART (Two wire/Four)
The Scene Display	Four Digits LCD Display
Shell Material	Aluminum
Connection	Flange(optional)/Thread
Protection Grade	IP67

GWLM-34	
Applicable Medium	Liquids,particularly low dielectric constant liquid
Explosion-proof Grade	Exib IIC T6 Gb/Exd IIC T6 Gb
Measuring Range	6 meters
Frequency	500MHz-1.8GHz
Temperature	-40 °C to 250 °C
Measurement Precision	±5 mm
Process Pressure	-0.1 to 4 MPa
Output Signal	4- 20 mA/HART (Two wire/Four)
The Scene Display	Four Digits LCD Display
Shell Material	Aluminum
Connection	Flange(optional)/Thread
Protection Grade	IP67

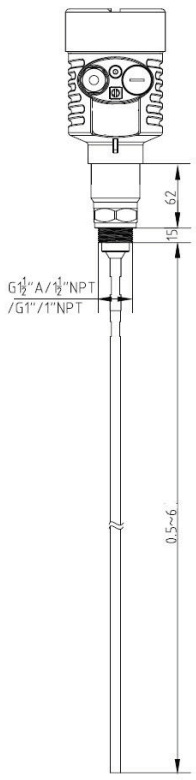
GWLM-35	
Applicable Medium	Liquids, especially high temperature and pressure
Explosion-proof Grade	Exib IIC T6 Gb/Exd IIC T6 Gb
Measuring Range	15 meters
Frequency	500MHz-1.8GHz
Temperature	-40 °C to 400 °C
Measurement Precision	±10 mm
Process Pressure	-0.1 to 40 MPa
Output Signal	4- 20 mA/HART (Two wire/Four)
The Scene Display	Four Digits LCD Display
Shell Material	Aluminum
Connection	Flange(optional)/ Thread
Protection Grade	IP67

Dimensions

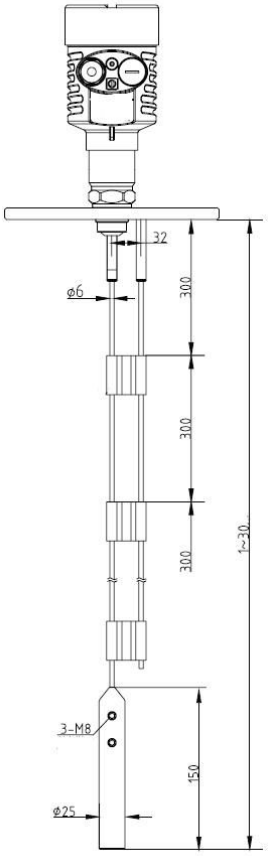
GWLM-31



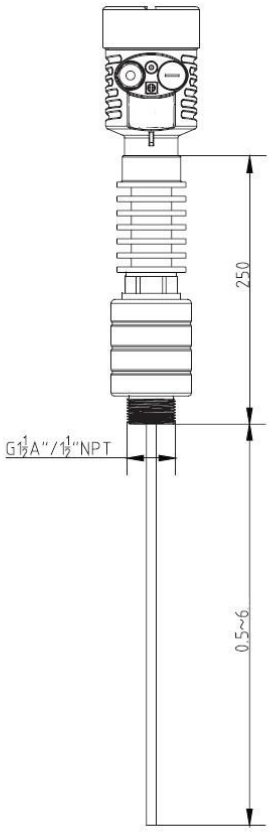
GWLM-32



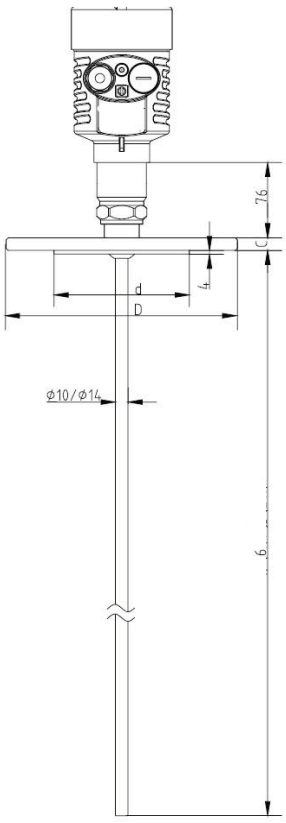
GWLM-33



GWLM-34



GWLM-35



Model Select

GWLM-31

GWLM-31		X	X	X	X	X	X	X	X
Measure Range	Single Cable Type (Range up to 30 m) * C10 = Cable type 10 m	Cxx							
	Single Rod Type (Range up to 6 m) ** R5 = Rod Type 5 m	Rx							
Ex Class	Standard (Without Approval)		P						
	Intrinsically Safe (Exia IIC T6 Ga)		I						
	Intrinsically Safe + Explosion proof (Exd (ia) IIC T6 Gb)		G						
Detecting Component Material	Cable Φ8mm / Stainless Steel 304			A					
	Cable Φ4mm / Stainless Steel 316L			B					
	Rod Φ10mm / Stainless Steel 304			C					
	Rod Φ10mm / Stainless Steel 316L			D					
Process Connection	Thread G1½" A				G				
	Thread 1½" NPT				N				
	Flange DN50 PN16C / Stainless Steel				C				
	Flange DN80 PN16C / Stainless Steel				D				
	Flange DN100 PN16C / Stainless Steel				E				
	Flange DN150 PN16C / Stainless Steel				F				
	Flange DN200 PN16C / Stainless Steel				H				
	Flange 2" 150LBS ANSI Convex / Stainless Steel 316L				I				
	Flange 3" 150LBS ANSI Convex / Stainless Steel 316L				J				
	Flange 4" 150LBS ANSI Convex / Stainless Steel 316L				K				
	Flange 6" 150LBS ANSI Convex / Stainless Steel 316L				L				
	Flange 8" 150LBS ANSI Convex / Stainless Steel 316 L				M				
Process Temperature	Normal (-40～130)℃					1			
	High Temperature (-40～250)℃					2			
Protection Class	Aluminum /IP67						L		
	Plastic /IP65						Q		
Cable Entry	M 20 x 1.5							M	
	½" NPT							N	
Display	With								V
	Without								X

GWLM-32

GWLM-32		X	X	X	X	X	X	X	X
Measure Range	Full PTFE Sealing Cable Type (up to 20 m) * C10 = Cable type 10 m	Cxx							
	Full PTFE Sealing Rod Type (up to 6 m) ** R5 = Rod Type 5 m	Rx							
Ex Class	Standard (Without Approval)		P						
	Intrinsically Safe (Exia IIC T6 Ga)		I						
	Intrinsically Safe + Explosion proof (Exd (ia) IIC T6 Gb)		G						
Detecting Component Material	Cable Φ4mm / PTFE			A					
	Rod Φ10mm / PTFE			C					
Process Connection	Thread G1½" A				G				
	Thread 1½" NPT				N				
	Flange DN50 PN16C / Stainless Steel / PTFE				C				
	Flange DN80 PN16C / Stainless Steel / PTFE				D				
	Flange DN100 PN16C / Stainless Steel / PTFE				E				
	Flange DN150 PN16C / Stainless Steel / PTFE				F				
	Flange DN200 PN16C / Stainless Steel / PTFE				H				
	Flange 2" 150LBS ANSI Convex / Stainless Steel 316L / PTFE				I				
	Flange 3" 150LBS ANSI Convex / Stainless Steel 316L / PTFE				J				
	Flange 4" 150LBS ANSI Convex / Stainless Steel 316L / PTFE				K				
	Flange 6" 150LBS ANSI Convex / Stainless Steel 316L / PTFE				L				
	Flange 8" 150LBS ANSI Convex / Stainless Steel 316 L / PTFE				M				
Process Temperature	Normal (-40～130)℃					1			
	High Temperature (-40～200)℃					2			
Protection Class	Aluminum /IP67						L		
	Plastic /IP65						Q		
Cable Entry	M 20 x 1.5							M	
	½" NPT							N	
Display	With								V
	Without								X

GWLM-33

GWLM-33	X	X	X	X	X	X	X	X
Measure Range: Double Cable Type (Range up to 30 m) * 10 = 10 m	xx							
Ex Class: Standard (Without Approval)		P						
Ex Class: Intrinsically Safe (Exia IIC T6 Ga)		I						
Ex Class: Intrinsically Safe + Explosion proof (Exd [ia] IIC T6 Gb)		G						
Detecting Component Material: Cable Φ6mm / Stainless Steel 304			A					
Detecting Component Material: Cable Φ6mm / Stainless Steel 316L			B					
Process Connection: Thread G1½" A				G				
Process Connection: Thread 1½" NPT				N				
Process Connection: Flange DN50 PN16C / Stainless Steel				C				
Process Connection: Flange DN80 PN16C / Stainless Steel				D				
Process Connection: Flange DN100 PN16C / Stainless Steel				E				
Process Connection: Flange DN150 PN16C / Stainless Steel				F				
Process Connection: Flange DN200 PN16C / Stainless Steel				H				
Process Connection: Flange 2" 150LBS ANSI Convex / Stainless Steel 316L				I				
Process Connection: Flange 3" 150LBS ANSI Convex / Stainless Steel 316L				J				
Process Connection: Flange 4" 150LBS ANSI Convex / Stainless Steel 316L				K				
Process Connection: Flange 6" 150LBS ANSI Convex / Stainless Steel 316L				L				
Process Connection: Flange 8" 150LBS ANSI Convex / Stainless Steel 316 L				M				
Process Temperature: Normal (-40～150)℃					1			
Protection Class: Aluminum /IP67						L		
Protection Class: Plastic /IP65						Q		
Cable Entry: M 20 x 1.5							M	
Cable Entry: ½" NPT							N	
Display: With								V
Display: Without								X

GWLM-34

GWLM-34	X	X	X	X	X	X	X	X
Measure Range: Coaxial Tube Type Antenna (up to 6 m) * 6 = 5 m	x							
Ex Class: Standard (Without Approval)		P						
Ex Class: Intrinsically Safe (Exia IIC T6 Ga)		I						
Ex Class: Intrinsically Safe + Explosion proof (Exd [ia] IIC T6 Gb)		G						
Detecting Component Material: Coaxial tube Φ25mm / Stainless Steel 304			A					
Detecting Component Material: Coaxial tube Φ25mm / Stainless Steel 316L			B					
Process Connection: Thread G1½" A				G				
Process Connection: Thread 1½" NPT				N				
Process Connection: Flange DN50 PN16C / Stainless Steel				C				
Process Connection: Flange DN80 PN16C / Stainless Steel				D				
Process Connection: Flange DN100 PN16C / Stainless Steel				E				
Process Connection: Flange DN150 PN16C / Stainless Steel				F				
Process Connection: Flange 2" 150LBS ANSI Convex / Stainless Steel 316L				H				
Process Connection: Flange 3" 150LBS ANSI Convex / Stainless Steel 316L				I				
Process Connection: Flange 4" 150LBS ANSI Convex / Stainless Steel 316L				J				
Process Connection: Flange 6" 150LBS ANSI Convex / Stainless Steel 316L				K				
Process Connection: Special Design				L				
Process Temperature: Normal (-40～130)℃					1			
Process Temperature: High Temperature (-40～250)℃					2			
Protection Class: Aluminum /IP67						L		
Protection Class: Plastic /IP65						Q		
Cable Entry: M 20 x 1.5							M	
Cable Entry: ½" NPT							N	
Display: With								V
Display: Without								X

GWLM-35

GWLM-35		X	X	X	X	X	X	X	X
Measure Range	Single Cable Type (Range up to 15 m) * C10 = Cable type 10 m	Cxx							
	Single Rod Type (Range up to 6 m) ** R5 = Rod Type 5 m	Rx							
Ex Class	Standard (Without Approval)		P						
	Intrinsically Safe (Exia IIC T6 Ga)		I						
	Intrinsically Safe + Explosion proof (Exd (ia) IIC T6 Gb)		G						
Detecting Component Material	Cable Φ8mm / Stainless Steel 304			A					
	Cable Φ8mm / Stainless Steel 316L			B					
	Rod Φ10mm / Stainless Steel 304			C					
	Rod Φ10mm / Stainless Steel 316L			D					
Process Connection	Thread G1½" A				G				
	Thread 1½" NPT				N				
	Flange DN50 PN16C / Stainless Steel				C				
	Flange DN80 PN16C / Stainless Steel				D				
	Flange DN100 PN16C / Stainless Steel				E				
	Flange DN150 PN16C / Stainless Steel				F				
	Flange DN200 PN16C / Stainless Steel				H				
	Flange 2" 150LBS ANSI Convex / Stainless Steel 316L				I				
	Flange 3" 150LBS ANSI Convex / Stainless Steel 316L				J				
	Flange 4" 150LBS ANSI Convex / Stainless Steel 316L				K				
	Flange 6" 150LBS ANSI Convex / Stainless Steel 316L				L				
	Flange 8" 150LBS ANSI Convex / Stainless Steel 316 L				M				
Process Temperature	Normal (-200~400)℃					1			
Protection Class	Aluminum /IP67						L		
	Plastic /IP65						Q		
Cable Entry	M 20 x 1.5							M	
	½" NPT							N	
Display	With								V
	Without								X