

RPL Radar Level Transmitters



- Continuous Non-contact level measurement for solids, liquids, pulps and slurries
- Measurement range up to 70 Metres
- Measurement accuracy: $\pm 10\text{mm}$
- Process temperatures up to 180°C
- Process pressures up to 40 Bar
- Power supply options: 2 wire 24vDC or 4 wire 20-72vDC, 20-250vAC
- Simple on site configuration via a menu driven matrix display
- Easy on site calibration without product handling
- Analogue Output 4-20mA
- Optional HART communications protocol

The RPL series of Radar level transmitters are suitable for continuous non contact level measurement applications for solids, liquid, pulps and slurries. The RPL transmitters are available with either a threaded or DIN flanged process connection and either a Rod or Horn antenna depending on the measurement range required. There are 4 different models available to cover measurement ranges up to 70 Metres with maximum operating temperatures up to 180°C and pressures up to 40 Bar. The radar pulses emitted by the antenna are reflected back by the product surface to the antenna with the time gap between the emission and return of the pulse named as the "fly time." The "fly time is proportional to the product surface distance. Through the matrix display it is possible to input all the necessary data for the level measurement and to display and recognize false echo signals.

Specification

RPL51

Applications:	Level transmitter for liquids and aggressive media.
Maximum Measurement range:	30 Metres
Accuracy:	±10mm
Process Connections:	G1.5" PVDF, 1.5" NPT PVDF
Antenna Material:	Polypropylene or PTFE
Temperature range:	-40 to + 120°C or -40 to 150° C
Pressure Range:	-1 to +3 Bar
Frequency Range:	6GHz
Output Signal:	4-20mA, HART

RPL52

Applications:	Level transmitter for liquids and aggressive media.
Maximum Measurement range:	30 Metres
Accuracy:	±10mm
Process Connections:	DN50, DN80, DN100, DN150 flanges PN16 / AISI 316L
Antenna Material:	PTFE
Temperature range:	-40 to 150° C
Pressure Range:	-1 to +16 Bar
Frequency Range:	6GHz
Output Signal:	4-20mA, HART

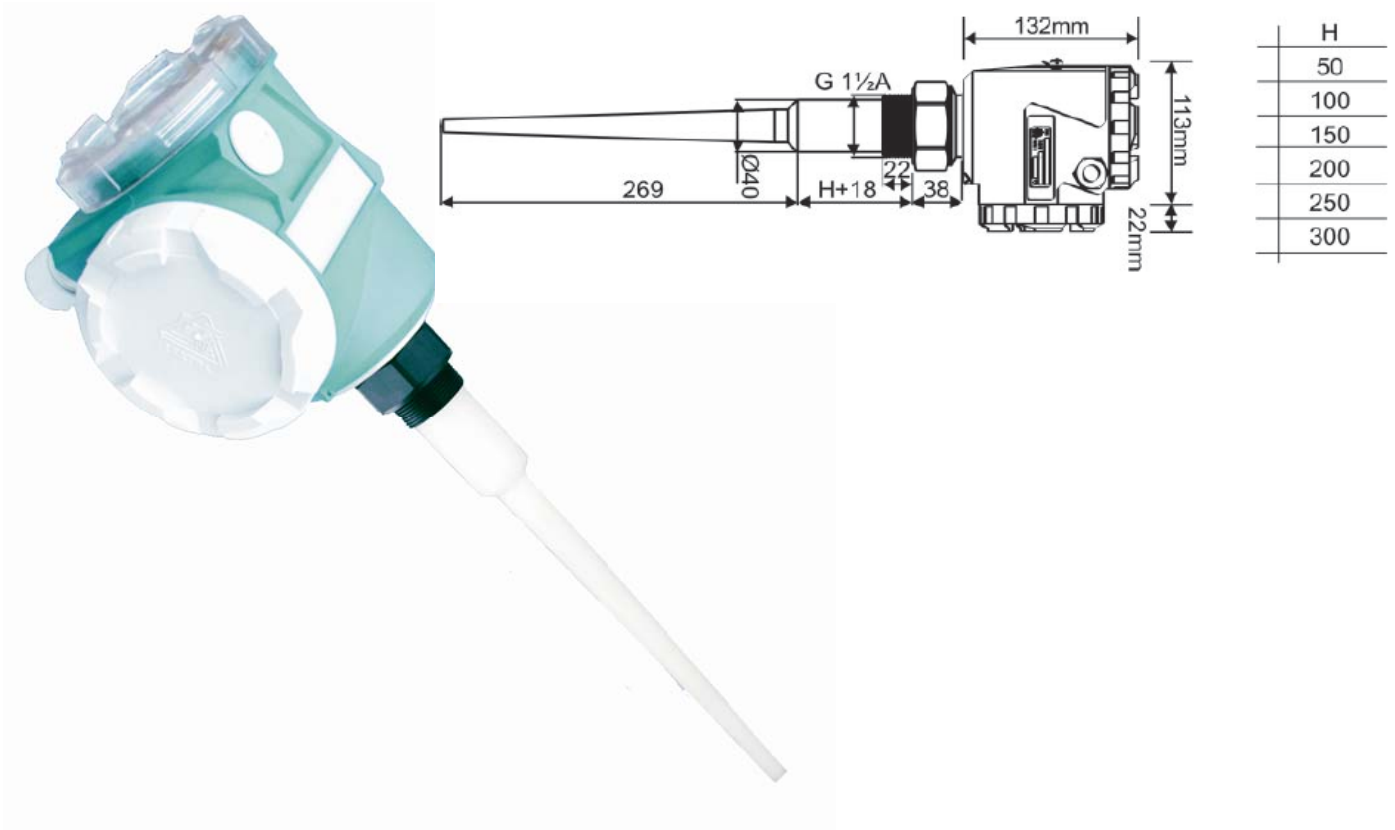
RPL53

Applications:	Level transmitter for storage and process applications
Maximum Measurement range:	30 Metres
Accuracy:	±10mm
Process Connections:	DN50, DN80, DN100, DN150, DN200, DN250 flanges PN16 / AISI 316L
Antenna Material:	PTFE and AISI316L
Temperature range:	-40 to 200° C
Pressure Range:	-1 to +40 Bar
Frequency Range:	6GHz
Output Signal:	4-20mA, HART

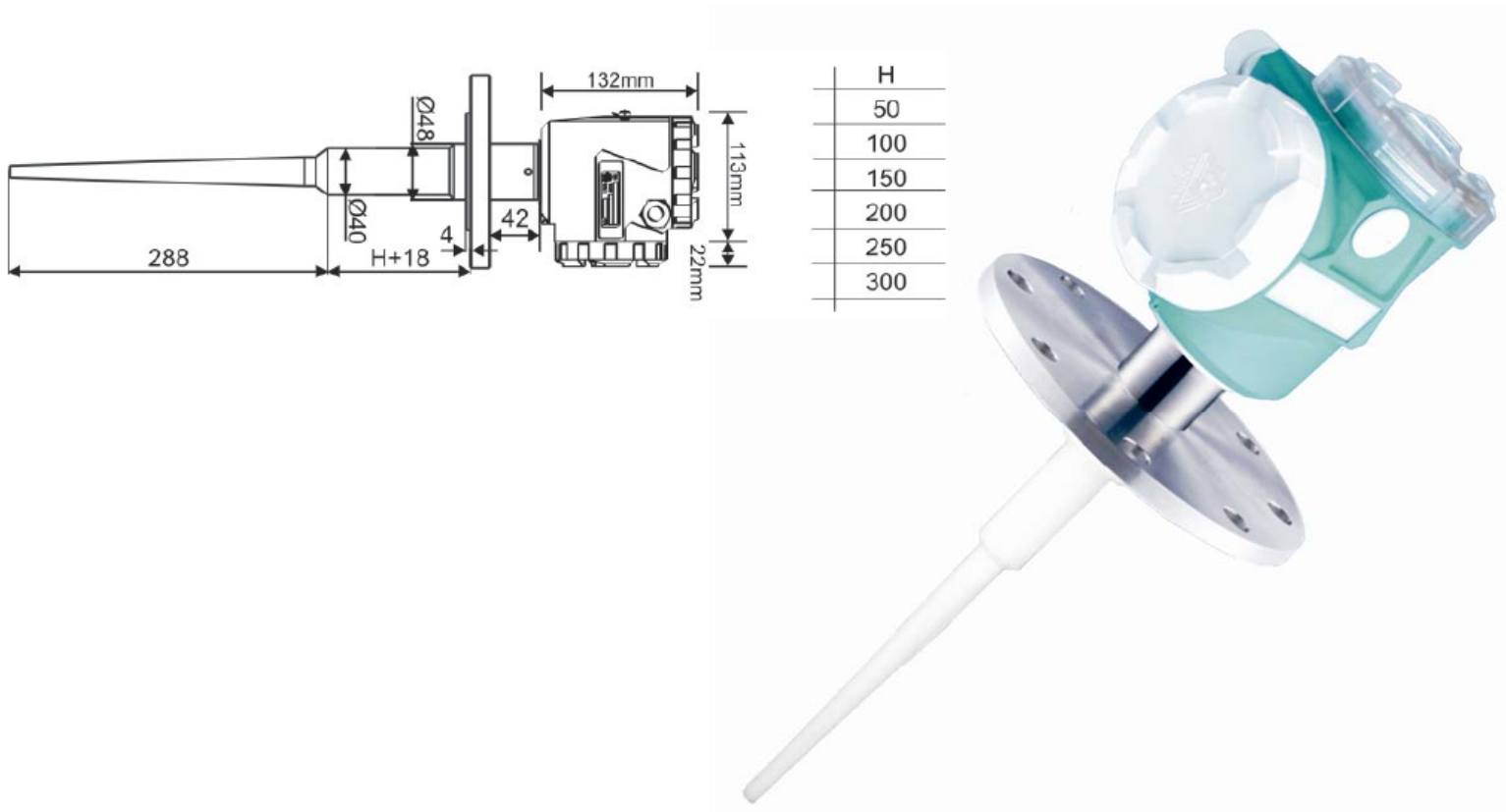
RPL54

Applications:	Level transmitter for storage and process applications
Maximum Measurement range:	70 Metres
Accuracy:	±20mm
Process Connections:	DN150, DN200, DN250 flanges PN16 / AISI 316L
Antenna Material:	PTFE and AISI316L
Temperature range:	-40 to 200° C
Pressure Range:	-1 to +40 Bar
Frequency Range:	6GHz
Output Signal:	4-20mA, HART

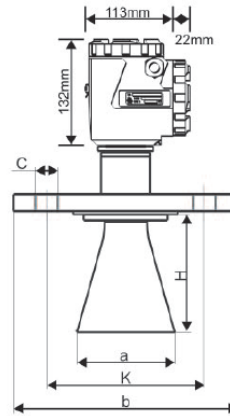
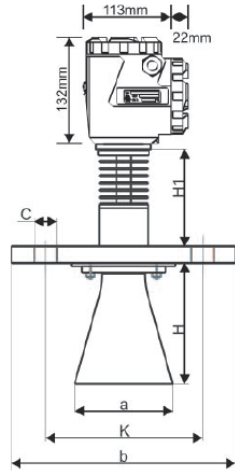
RPL51 Radar Level Transmitter



RPL52 Radar Level Transmitter

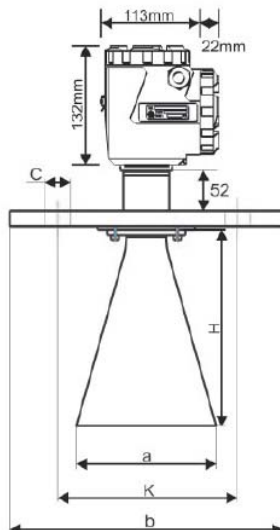
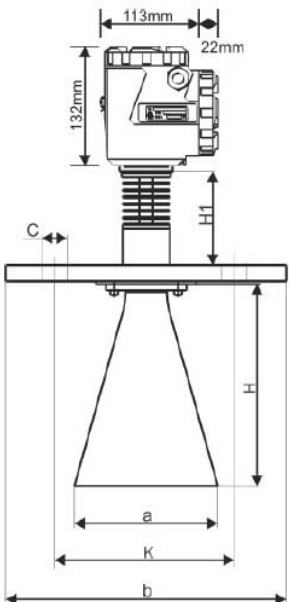
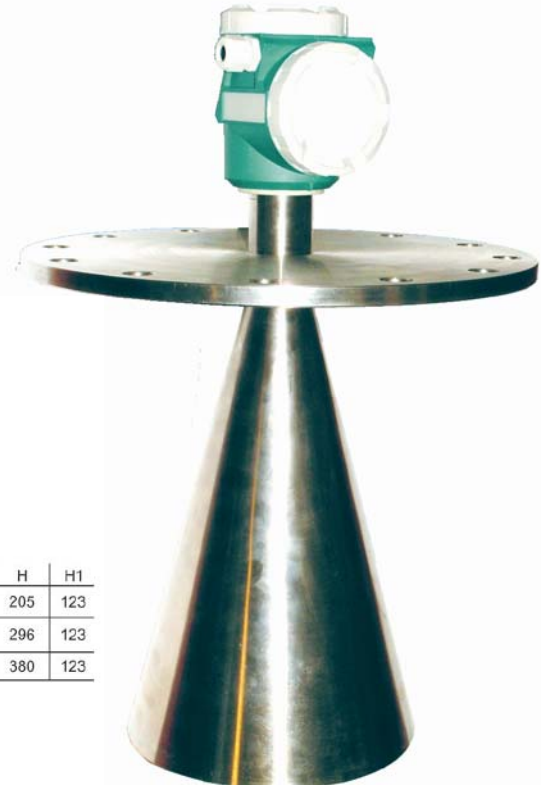


RPL53 Radar Level Transmitter



	a	K	b	C	H	H1
DN50		Ø125	Ø165	Ø16x4		123
DN80	Ø75	Ø160	Ø200	Ø16x8	60	123
DN100	Ø96	Ø180	Ø220	Ø16x8	120	123
DN150	Ø146	Ø240	Ø285	Ø20x8	205	123

RPL54 Radar Level Transmitter



	a	K	b	C	H	H1
DN150	Ø146	Ø240	Ø285	Ø20x8	205	123
DN200	Ø197	Ø295	Ø340	Ø20x12	296	123
DN250	Ø244	Ø355	Ø405	Ø24x12	380	123

RPL51 Ordering Codes

RPL51	Code	Version						
	I	Intrinsically Safe (PENDING)						
	P	Standard						
	Code	Antenna shape / Material/ Process temperature						
	A	Rod / PP / -40+120°C						
	B	Rod / PTFE / -40+150°C						
	Code	Antenna extension						
	A	50mm						
	B	100mm						
	C	150mm						
	D	200mm						
	E	250mm						
	F	300mm						
	Code	Process connection/Material						
	GP	Thread G1 ½ A PN3/PVDF						
	NP	Thread G1 ½ NPT PN3/PVDF						
	Code	Electronic preamplifier						
	A	4+20mA 2-wire 24 Vdc						
	B	4+20mA HART (2-wire) 24Vdc						
	C	4+20mA 20+72Vdc / 20+250Vac 4-wire						
	D	4+20mA 20+72Vdc / 20+250Vac HART (4-wire)						
	Code	Housing / Protection /Antenna Protection						
	S	PBT / IP65 / IP67						
	Code	Cable entry						
	M	PG13,5						
	Code	programming display						
	A	Yes						
	X	No						
RPL51	P	B	A	GP	B	S	M	A

RPL52 Ordering Codes

RPL52	Code Version							
	I	Intrinsically safe (PENDING)						
	P	Standard						
	B	Code Antenna shape/ Materiale/ Process temperature						
		Rod / PTFE / -40+150°C						
	A	Code Antenna extension						
		A	50mm					
		B	100mm					
		C	150mm					
		D	200mm					
		E	250mm					
		F	300mm					
	FC	Code Process connection / Material						
		DN50 PN16 AISI316L flange						
		FD	DN80 PN16 AISI316L flange					
FE		DN100 PN16 AISI316L flange						
FK		DN150 PN16 AISI316L flange						
B	Code Electronic preamplifier							
	A	4+20mA 2-wire; 24Vdc						
	B	4+20mA HART (2-wire); 24Vdc						
	C	4+20mA 20+72Vdc / 20+250Vac 4-wire						
	D	4+20mA 20+72Vdc / 20+250Vac HART (4-wire)						
S	Code Housing / Protection /Antenna protection							
	PBT / IP65 / IP67							
M	Code Cable entry							
	PG13,5							
A	Code Programming display							
	A	Yes						
	X	No						
RPL52	P	B	A	FC	B	S	M	A

RPL53 Ordering Codes

RPL53	Code	Version							
	I	Intrinsically safe (PENDING)							
	P	Standard							
	Code	Antenna shape / Materiale/ Process temperature							
	C	Horn Ø50mm / AISI316L (only applicable for installation with standpipe)							
	D	Horn Ø80mm / AISI316L (only applicable for installation with standpipe)							
	E	Horn Ø100mm / AISI316L							
	F	Horn Ø150mm / AISI316L							
	Code	Antenna extension							
	A	None							
	B	200mm							
	C	500mm							
	Code	Process connection / Material							
	FA	DN50 PN16 AISI316L flange							
	FB	DN80 PN16 AISI316L flange							
	FC	DN100 PN16 AISI316L flange							
	FD	DN150 PN16 AISI316L flange							
	FE	Flangia DN200 PN16 AISI316L							
	FH	Flangia DN250 PN16 AISI316L							
	Code	Seal / Process temperature							
	2	Viton / -40+130°C							
	3	Kalrez / -20+130°C							
	4	Viton / -40+200°C with radiator fins							
	5	Kalrez / -20+200°C with radiator fins							
	Code	Electronic preamplifier							
	A	4+20mA 2-wire; 24Vdc							
	B	4+20mA HART (2-wire); 24Vdc							
	C	4+20mA 20+72Vdc / 20+250Vac 4-wire							
	D	4+20mA 20+72Vdc / 20+250Vac HART (4-wire)							
	Code	Housing / Protection /Antenna protection							
	S	PBT / IP65 / IP67							
	Code	Cable entry							
	M	PG13,5							
	Code	Programming display							
	A	Yes							
	X	No							
RPL53	P	E	A	FC	2	B	S	M	A

RPL54 Ordering Codes

RPL54	Code	Version							
	I	Intrinsically safe (PENDING)							
	P	Standard							
	Code	Antenna shape / Materiale/ Process temperature							
	F	Hom Ø150mm / AISI316L							
	G	Hom Ø200mm / AISI316L							
	H	Hom Ø120mm / AISI316L							
	Code	Antenna extension							
	A	None							
	B	200mm							
	C	500mm							
	Code	Process connection / Material							
	FB	DN150 PN16 AISI316L flange							
	FC	DN200 PN16 AISI316L flange							
	FD	DN250 PN16 AISI316L flange							
	Code	Seal /Process temperature							
	2	Viton / -40+130°C							
	3	Kalrez / -20+130°C							
	4	Viton / -40+200°C with radiator fins							
	5	Kalrez / -20+200°C with radiator fins							
	Code	Electronic preamplifier							
	A	4+20mA 2-wire; 24Vdc							
	B	4+20mA HART (2-wire); 24Vdc							
	C	4+20mA 20+72Vdc / 20+250Vac 4-wire							
	D	4+20mA 20+72Vdc / 20+250Vac HART (4-wire)							
	Code	Housing / Protection/ Antenna protection							
	S	PBT / IP65 / IP67							
	Code	Cable entry							
	M	PG13,5							
	Code	Programming display							
	A	Yes							
	X	No							
RPL54	P	H	A	FD	2	B	S	M	A



These products comply with current European Directives