SmartLine Radar Level Meter for Solids
RM60

Model Selection Guide

Reliable measurement in difficult process conditions
+/- 10 mm / +/-0.4" standard accuracy
Operates up to a flange temperature of 200^{0}C / 390^{0}F and 40 bar / 580 psig
Measuring range up to 80 m / 260 ft.
Long antenna versions can be extended to suit any nozzle length
PACTware and DTMs included as standard
Optional second current output
Directly-accessible graphic touchscreen/wizard (optional)
Converter rotates 360^0
Tripple barrier gas-tight protection available for working with dangerous gases (using pre-stressed fused glass)

Instructions

Select the desired key number. The arrow to the right marks the selection available.
Make the desired selections from Tables I through V using the column below the proper arrow. A dot (•) denotes availability.

Table	I	II	III	IV	V
RM60 -	4	_ _ _ _ _	_ _ _ _	_ _ _ _ _	_ _ _ _ _

KEY NUMBER / Description	Selection	Availability
RM60	RM60	↓
TABLE I		
Level Meter Code	4	•
TABLE II		
Approvals		
None	0 _ _ _ _	**h**
ATEX II 1, 1/2, 2 G/D Ex ia IIC T3...T6	2 _ _ _ _	**a**
ATEX II 1/2, 2 G/D Ex d[ia] IIC T3...T6	3 _ _ _ _	**b**
FM IS Cl. I Div. 1 Gr. A-G - Dual Seal	6 _ _ _ _	**c**
FM XP Cl. I Div. 1 Gr. A-G - Dual Seal	7 _ _ _ _	**d**
INMETRO Cepel G/D 1/2, 2 Ex ia IIC T3…T6	B _ _ _ _	
INMETRO Cepel G/D 1/2, 2 Ex d[ia] IIC T3…T6	C _ _ _ _	
NEPSI Ex ia IIC T3...T6	E _ _ _ _	**a**
NEPSI Ex dia IIC T3...T6	F _ _ _ _	**b**
CSA IS Cl. I Div. 1 Gr. A-G - Dual Seal	H _ _ _ _	**c**
CSA XP Cl. I Div. 2 Gr. A-G - Dual Seal	K _ _ _ _	**d**
IECEx Zone 0 Ex ia IIC T3…T6, Ex iaD 20	M _ _ _ _	**e**
IECEx Zone 0/1 Exd [ia] IIC T3…T6, Ex tD [iaD] A21/20	N _ _ _ _	**b**
Material Process Connection and Antenna		
Horn 316L / 1.4404 + Drop PTFE (40 bar), Drop PP (16 bar)	_ 0 _ _ _	•
Antenna		
Horn DN 80 (Ø 75 mm/2.95 inch) long + purging system	_ _ 6 _ _	**f**
Horn DN 100 (Ø 95 mm/3.7 inch) long + purging system	_ _ G _ _	**f**
Drop PTFE DN 80 (Ø 75 mm/2.95 inch) long / -50°C...+150°C	_ _ P _ _	**k**
Drop PP DN 80 (Ø 75 mm/2.95 inch) long / -40°C... +100°C	_ _ S _ _	**l**
Drop PP DN 150 (Ø 144mm/5,67 inch) long / -40°C... +100°C	_ _ T _ _	**m**
Sheet metal horn DN80 (Ø 75 mm/2.95 inch) long + purging system	_ _ V _ _	**f**
Sheet metal horn DN 100 (Ø 95 mm/3.7 inch) long + purging system	_ _ W _ _	**f**
Sheet metal horn DN 150 (Ø 140 mm / 5.5 inch) long + purging system	_ _ X _ _	**f**
Sheet metal horn DN 200 (Ø 190mm/7.48 inch) long + purging system	_ _ Y _ _	**f**
Antenna Extension		
None	_ _ _ 0 _	•
Extension 105 mm (4.13 inch)	_ _ _ 1 _	•
Extension 210 mm (8.26 inch)	_ _ _ 2 _	•
Extension 315 mm (12.4 inch)	_ _ _ 3 _	•
Extension 420 mm (16.54 inch)	_ _ _ 4 _	•
Extension 525 mm (20.67 inch)	_ _ _ 5 _	•
Extension 630 mm (24.80 inch)	_ _ _ 6 _	•
Extension 735 mm (28.94 inch)	_ _ _ 7 _	•
Extension 840 mm (33.07 inch)	_ _ _ 8 _	•
Extension 945 mm (37.20 inch)	_ _ _ A _	•
Extension 1050 mm (41.34 inch)	_ _ _ B _	•
Flange plate protection DN80, DN100, 3", 4", 80A, 100A for Drop PP DN 80	_ _ _ P _	**n**
Flange plate protection DN150, 6", 8" for Drop PP DN 80 or DN 150	_ _ _ R _	**o**
Flange plate protection DN80,DN100,3",4",80A,100A for Drop PTFE DN 80	_ _ _ S _	**n**
Flange plate protection DN150, 6", 8" for Drop PTFE DN 80	_ _ _ T _	**o**
Feedthrough / Temperature / Sealing Gasket		
Standard: -40^{U}C (-40^{U}F)…+150^{U}C (302^{U}F), 40 bar (580 psi) max. / FKM/FPM	_ _ _ _ 0	**t**
Standard: -20^{U}C (-4^{U}F)…+150^{U}C (302^{U}F), 40 bar (580 psi) max. / Kalrez 6375	_ _ _ _ 1	**t**
Dual: Metaglas / -30^{U}C (-22^{U}F)…+150^{U}C (302^{U}F), 40 bar (580 psi) / FKM/FPM	_ _ _ _ 2	**t**
Dual: Metaglas / -20^{U}C (-4^{U}F)…+150^{U}C (302^{U}F), 40 bar (580 psi) / Kalrez 6375	_ _ _ _ 3	**t**
Standard: -50°C...+150°C / EPDM	_ _ _ _ 4	**t**
Dual Metaglas: -30°C...+150°C / EPDM	_ _ _ _ 5	**t**
Standard / -40°C...+200°C / FKM/FPM (distance piece included)	_ _ _ _ F	**t**
Standard / -20°C...+200°C / Kalrez 6375 (distance piece included)	_ _ _ _ G	**t**
Metaglas® / -30°C...+200°C / FKM/FPM (distance piece included)	_ _ _ _ H	**t**
Metaglas® / -20°C...+200°C / Kalrez 6375 (distance piece included)	_ _ _ _ K	**t**
Standard / -40°C…+150°C / FKM/FPM for Non-Ex Drop antennas	_ _ _ _ X	**s**
Standard / -50°C…+150°C / EPDM for Non-Ex Drop antennas	_ _ _ _ Y	**s**

Not For Drop Antenna

TABLE III

		Selection	Availability
Process Connection EN	G1 1/2" A ISO228	3 0 0 _	**p**
	DN 80 PN 40 Form B1 EN1092	7 0 0 _	•
	DN 100 PN 16 Form B1 EN1092	8 0 0 _	•
	DN 100 PN 40 Form B1 EN1092	A 0 0 _	•
	DN 150 PN 16 Form B1 EN1092	B 0 0 _	•
	DN 150 PN 40 Form B1 EN1092	C 0 0 _	•
Process Connection ASME	1 1/2" NPT	0 3 0 _	**p**
	3" 150 lb RF ASME B16.5	0 A 0 _	•
	3" 300 lb RF ASME B16.5	0 B 0 _	•
	4" 150 lb RF ASME B16.5	0 C 0 _	•
	4" 300 lb RF ASME B16.5	0 D 0 _	•
	6" 150 lb RF ASME B16.5	0 E 0 _	•
	8" 150 lb RF ASME B16.5	0 F 0 _	•
Process Connection Other	10K 80A RF JIS B2220	0 0 7 _	•
	10K 100A RF JIS B2220	0 0 8 _	•
Output	1 Output 4…20mA (Hart)	_ _ _ 0	•
	2 Outputs 4…20mA (Hart) + 4…20mA	_ _ _ 2	•
	Foundation Fieldbus (4 wire + local HART)	_ _ _ A	•
	Profibus PA (4 wire + local HART)	_ _ _ D	

TABLE IV

Housing/Cable Entry/Cable gland	Aluminum / M20 x 1.5 / without	0 _ _ _ _	•
	Aluminum / 1/2" NPT / without	1 _ _ _ _	•
	Aluminum / G 1/2" / without	2 _ _ _ _	•
	Aluminum / M20 x 1.5 / Plastic (Non-Ex: black, Ex i: blue)	3 _ _ _ _	•
	Aluminum / M20 x 1.5 / Metal (only for Ex d devices)	4 _ _ _ _	•
	Stainless Steel / M25 x 1.5 / without	A _ _ _ _	•
	Stainless Steel / 1/2" NPT / without	B _ _ _ _	•
	Stainless Steel / M25 x 1.5 / plastic M20 (Non-Ex: Black, Exi blue)	D _ _ _ _	•
	Stainless Steel / M25 x 1.5 / metal M20 (only for Ex d devices)	E _ _ _ _	•
Housing Option	None	_ 0 _ _ _	•
	Weather Protection Option	_ 2 _ _ _	•
HMI (display & keys)	None - No Display	_ _ 0 _ _	•
	English	_ _ 1 _ _	•
	German	_ _ 2 _ _	•
	French	_ _ 3 _ _	•
	Italian	_ _ 4 _ _	•
	Spanish	_ _ 5 _ _	•
	Portugese	_ _ 6 _ _	•
	Japanese	_ _ 7 _ _	•
	Chinese (Mandarin)	_ _ 8 _ _	•
	Russian	_ _ A _ _	•
Version	Honeywell	_ _ _ V _	•
No Selection	None	_ _ _ _ 0	•
	2° PP slanted flange	_ _ _ _ 1	•

TABLE V

Calibration Certificates	None	0 0 0 _ _	•
	Calibration certificate 2 points	0 0 1 _ _	•
Drawing / Tag Number	None	_ _ _ 0 0	•
	Tag No. stainless steel plate (1 line; 12 characters)	_ _ _ 0 2	•

RESTRICTIONS

Restrictions	Available only with		Not Available with	
Letter	**Table**	**Selection**	**Table**	**Selection**
a			II	_ _ _ _ X
			IV	4 _ _ _ _, E _ _ _ _
b			II	_ _ _ _ X
			III	_ _ _ A, _ _ _ D
			IV	3 _ _ _ _, A _ _ _ _, B _ _ _ _, D _ _ _ _, E _ _ _ _
c			II	_ _ V _ _, _ _ W _ _, _ _ X _ _, _ _ Y _ _, _ _ _ _ F, _ _ _ _ G, _ _ _ _ H, _ _ _ _ K, _ _ _ _ X
			III	_ _ _ A, _ _ _ D, 3 0 0 _, 7 0 0 _, 8 0 0 _, A 0 0 _, B 0 0 _, C 0 0 _
			IV	2 _ _ _ _, 4 _ _ _ _, A _ _ _ _, B_ _ _ _, D _ _ _ _, E _ _ _ _
d			II	_ _ V _ _, _ _ W _ _, _ _ X _ _, _ _ Y _ _, _ _ _ _ F, _ _ _ _ G, _ _ _ _ H, _ _ _ _ K, _ _ _ _ X
			III	_ _ _ A, _ _ _ D, 3 0 0 _, 7 0 0 _, 8 0 0 _, A 0 0 _, B 0 0 _, C 0 0 _
			IV	2 _ _ _ _, 3 _ _ _ _, A _ _ _ _, B_ _ _ _, D _ _ _ _, E _ _ _ _
e			II	_ _ _ _ X
			III	_ _ _ A, _ _ _ D
			IV	4 _ _ _ _, A _ _ _ _, B_ _ _ _, D _ _ _ _, E _ _ _ _
f			II	_ _ _ P _, _ _ _ R _, _ _ _ S _, _ _ _ T _, _ _ _ _ X
h			IV	4 _ _ _ _, E _ _ _ _
k			II	_ _ _ _ F, _ _ _ _ G, _ _ _ _ H, _ _ _ _ K
			II	_ _ _ 6 _, _ _ _ 7 _, _ _ _ 8 _, _ _ _ A _, _ _ _ B _, _ _ _ P _, _ _ _ R_
l			II	_ _ _ _ F, _ _ _ _ G, _ _ _ _ H, _ _ _ _ K
			II	_ _ _ 6 _, _ _ _ 7 _, _ _ _ 8 _, _ _ _ A _, _ _ _ B _, _ _ _ S _, _ _ _ T_
m			II	_ _ _ _ F, _ _ _ _ G, _ _ _ _ H, _ _ _ _ K
			II	_ _ _ 6 _, _ _ _ 7 _, _ _ _ 8 _, _ _ _ A _, _ _ _ B _, _ _ _ P _, _ _ _ S _, _ _ _ T _
n	III	7 0 0 _, 8 0 0 _, A 0 0 _, 0 A 0 _, 0 B 0 _, 0 C 0 _, 0 D 0 _, 0 0 7 _, 0 0 8 _	II	_ _ _ _ F, _ _ _ _ G, _ _ _ _ H, _ _ _ _ K
o	III	B 0 0 _, C 0 0 _, 0 E 0 _, 0 F 0 _	II	_ _ _ _ F, _ _ _ _ G, _ _ _ _ H, _ _ _ _ K
p	IV	_ _ _ _ 0		
s	II	0 _ P _ _, 0 _ S _ _, 0 _ T _ _		
t			II	0 _ P _ _, 0 _ S _ _, 0 _ T _ _