

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°C / 390°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°
 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

RM60

Description

Availability

Selection

RM60 ↓

TABLE I

Level Meter Code

4 •

TABLE II

Key Number	Description	Selection	Availability
Approvals	None ATEX II 1, 1/2, 2 G/D Ex ia IIC T3...T6 ATEX II 1/2, 2 G/D Ex d[ia] IIC T3...T6 FM IS Cl. I Div. 1 Gr. A-G - Dual Seal FM XP Cl. I Div. 1 Gr. A-G - Dual Seal INMETRO Cepel G/D 1/2, 2 Ex ia IIC T3...T6 INMETRO Cepel G/D 1/2, 2 Ex d[ia] IIC T3...T6 NEPSI Ex ia IIC T3...T6 NEPSI Ex dia IIC T3...T6 CSA IS Cl. I Div. 1 Gr. A-G - Dual Seal CSA XP Cl. I Div. 2 Gr. A-G - Dual Seal IECEx Zone 0 Ex ia IIC T3...T6, Ex iaD 20 IECEx Zone 0/1 Exd [ia] IIC T3...T6, Ex tD [iaD] A21/20	0 _____ 2 _____ 3 _____ 6 _____ 7 _____ B _____ C _____ E _____ F _____ H _____ K _____ M _____ N _____	h a b c d a b c d e 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 Horn DN 100 (Ø 95 mm/3.7 inch) long + purging system Drop PTFE DN 80 (Ø 75 mm/2.95 inch) long / -50°C...+150°C Drop PP DN 80 (Ø 75 mm/2.95 inch) long / -40°C... +100°C Drop PP DN 150 (Ø 144mm/5.67 inch) long / -40°C... +100°C Sheet metal horn DN80 (Ø 75 mm/2.95 inch) long + purging system Sheet metal horn DN 100 (Ø 95 mm/3.7 inch) long + purging system Sheet metal horn DN 150 (Ø 140 mm / 5.5 inch) long + purging system Sheet metal horn DN 200 (Ø 190mm/7.48 inch) long + purging system	_ 6 _ _ _ _ G _ _ _ _ P _ _ _ _ S _ _ _ _ T _ _ _ _ V _ _ _ _ W _ _ _ _ X _ _ _ _ Y _ _ _	f f k l m f f f f
Antenna Extension	None Extension 105 mm (4.13 inch) Extension 210 mm (8.26 inch) Extension 315 mm (12.4 inch) Extension 420 mm (16.54 inch) Extension 525 mm (20.67 inch) Extension 630 mm (24.80 inch) Extension 735 mm (28.94 inch) Extension 840 mm (33.07 inch) Extension 945 mm (37.20 inch) Extension 1050 mm (41.34 inch) Flange plate protection DN80, DN100, 3", 4", 80A, 100A for Drop PP DN 80 Flange plate protection DN150, 6", 8" for Drop PP DN 80 or DN 150 Flange plate protection DN80, DN100, 3", 4", 80A, 100A for Drop PTFE DN 80 Flange plate protection DN150, 6", 8" for Drop PTFE DN 80	_ _ 0 _ _ _ _ 1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7 _ _ _ _ 8 _ _ _ _ A _ _ _ _ B _ _ _ _ P _ _ _ _ R _ _ _ _ S _ _ _ _ T _ _	• • • • • • • • • • • n o n o
Feedthrough / Temperature / Sealing Gasket	Standard: -40°C (-4°F)...+150°C (302°F), 40 bar (580 psi) max. / FKM/FPM Standard: -20°C (-4°F)...+150°C (302°F), 40 bar (580 psi) max. / Kalrez 6375 Dual: Metaglas / -30°C (-22°F)...+150°C (302°F), 40 bar (580 psi) / FKM/FPM Dual: Metaglas / -20°C (-4°F)...+150°C (302°F), 40 bar (580 psi) / Kalrez 6375 Standard: -50°C...+150°C / EPDM Dual Metaglas: -30°C...+150°C / EPDM Standard / -40°C...+200°C / FKM/FPM (distance piece included) Standard / -20°C...+200°C / Kalrez 6375 (distance piece included) Metaglas® / -30°C...+200°C / FKM/FPM (distance piece included) Metaglas® / -20°C...+200°C / Kalrez 6375 (distance piece included) Standard / -40°C...+150°C / FKM/FPM for Non-Ex Drop antennas Standard / -50°C...+150°C / EPDM for Non-Ex Drop antennas	_ _ _ 0 _ _ _ 1 _ _ _ 2 _ _ _ 3 _ _ _ 4 _ _ _ 5 _ _ _ F _ _ _ G _ _ _ H _ _ _ K _ _ _ X _ _ _ Y	t t t t t t t t t s 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 _	•
Process Connection ASME	DN 150 PN 40 Form B1 EN1092	C 0 0 _	•
	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 _	•
Process Connection Other	6" 150 lb RF ASME B16.5	0 E 0 _	•
	8" 150 lb RF ASME B16.5	0 F 0 _	•
Output	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
c			IV	3____, A____, B____, D____, E____
			II	-- V____, W____, X____, Y____, ____ F, ____ G, ____ H, ____ K, ____ X
			III	____ A, ____ D, 300____, 700____, 800____, A00____, B00____, C00____
d			IV	2____, 4____, A____, B____, D____, E____
			II	-- V____, W____, X____, Y____, ____ F, ____ G, ____ H, ____ K, ____ X
			III	____ A, ____ D, 300____, 700____, 800____, A00____, B00____, C00____
e			IV	2____, 3____, A____, B____, D____, E____
			II	____ X
f			III	____ A, ____ D
			IV	4____, A____, B____, D____, E____
h			II	____ P____, ____ R____, ____ S____, ____ T____, ____ X
k			IV	4____, E____
			II	____ F, ____ G, ____ H, ____ K
l			II	____ 6____, ____ 7____, ____ 8____, ____ A____, ____ B____, ____ P____, ____ R____
			II	____ F, ____ G, ____ H, ____ K
m			II	____ 6____, ____ 7____, ____ 8____, ____ A____, ____ B____, ____ P____, ____ S____, ____ T____
			II	____ 6____, ____ 7____, ____ 8____, ____ A____, ____ B____, ____ P____, ____ S____, ____ T____
n	III	700____, 800____, A00____, 0A0____, 0B0____, 0C0____, 0D0____, 007____, 008____	II	____ F, ____ G, ____ H, ____ K
o	III	B00____, C00____, 0E0____, 0F0____	II	____ F, ____ G, ____ H, ____ K
p	IV	____ 0		
s	II	0_P____, 0_S____, 0_T____		
t			II	0_P____, 0_S____, 0_T____