

SmartLine Guided Radar Level Meter

RM71 All but 2mm For 2mm probe style see MSG 36-RM-16-03

Model Selection Guide



Higher signal dynamics and sharper pulses improve accuracy
Displays level and interface
Easy navigation using a touch screen without opening the housing (installation wizard)
PACTware and DTMs included as standard
Optional second current output - used for displaying interface measurements etc.
Display in 9 languages including Chinese, Japanese and Russian.

Instructions

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

Table	I	II	III	IV	V	VI
RM71	- 4	-----	-----	-----	-----	-----

KEY NUMBER

RM71

Description

Selection Availability

RM71 ↓

TABLE I

Level Meter Code

4 •

TABLE II

Approvals	None ATEX II G/D 1, 1/2, 2 Ex ia IIC T6 ATEX II G/D 1/2, 2 Ex d ia IIC T6 FM IS Cl. I, II, III Div. 1,2 Gr. A-G Dual Seal FM XP Cl. I, II, III Div. 1,2 Gr. A-G Dual Seal ATEX II 3G Ex nA II T3...T6 NEPSI Ex ia IIC T3...T6 NEPSI Ex d[ia] IIC T3...T6 CSA IS Cl. I, II, III Div. 1,2 Gr. A-G + Dual seal CSA XP Cl. I, II, III 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	
Material Process Connection and Probe	316L / 1.4404 - 40 bar Hastelloy C-22 / 2.4602 - 40 bar 316L / 1.4404 - 100 bar Hastelloy C-22 / 2.4602 - 100 bar	
Probe	Single rod dia. 8 mm(0.31"); length 1 m (3.28') min. to 4 m (13.12') max. Double rod dia. 8 mm (0.31") ; length 1 m (3.28') min. to 4 m (13.12') max. Coax dia. 22 mm (0.87"); length 1 m (3.28') min. to 6 m (19.69') max. Single cable dia. 4 mm (0.16"); length 1m (3.28') min. to 35m(114.83') max. Single cable dia. 8 mm (0.31"); length 1 m (3.28') min. to 35 m (114.83') max. Double cable dia. 4 mm (0.16"); length 1 m (3.28') min. to 8 m (26.25') max. Single cable Ø 4 mm / 0.16 inch FEP coated (1mm) max. 35 m / 114.83 ft Segmented single rod Ø 8mm Segmented coax Ø 22mm	Probe lengths are available in 3.94" (100 mm) increments. Refer to Length table
Probe End Type	None (rod & coax version) Counterweight 12 mm (0.47") x 100 mm (3.94"); Single cable 8 mm(0.31") Counterweight 38 mm (1.5") x 245 mm (9.65"); Single cable 8 mm (0.31") Counterweight 20 mm (0.79") x 100 mm (3.94"); Single cable 4 mm (0.16") Counterweight 38 mm (1.5") x 60 mm (2.36"); Double cable 4 mm (0.16") Turnbuckle Chuck Threaded end Crimped end Open end	
Feedthrough / Temperature / Sealing	Standard: -40°C (-40°F)...+200°C (392°F) / FKM/FPM Standard: -20°C (-4°F)...+200°C (392°F) / Kalrez 6375 Standard: -50°C (-58°F)...+150°C (302°F), / EPDM	

0	a
2	r
3	p
6	q
7	n
A	r
E	r
F	p
H	q
K	n
M	w
N	p
0	•
1	b
2	•
3	b
0	c
1	d
2	e
3	f
4	g
5	h
7	z
M	c
S	x
0	•
1	•
2	•
3	•
4	•
A	•
B	•
C	•
D	•
E	•
0	•
1	•
4	•

TABLE III	Description	Selection	Availability	
Process Connection EN	G 3/4" A ISO228	100_	•	
	G 1" A ISO228	200_	•	
	G 1 1/2" A ISO228	300_	•	
	DN 25 PN 40 Form B1 EN1092	400_	•	
	DN 40 PN 40 Form B1 EN1092	500_	•	
	DN 50 PN 40 Form B1 EN1092	600_	•	
	DN 80 PN 40 Form B1 EN1092	700_	•	
	DN 100 PN 16 Form B1 EN1092	800_	•	
	DN 100 PN 40 Form B1 EN1092	A00_	•	
	DN 150 PN 16 Form B1 EN1092	B00_	•	
	DN 150 PN 40 Form B1 EN1092	C00_	•	
	DN50 PN63 Form B1 EN1092	D00_	•	
	DN80 PN63 Form B1 EN1092	E00_	•	
	DN100 PN63 Form B1 EN1092	F00_	•	
	DN25 PN63/PN100 Form B1 EN1092	K00_	•	
	DN40 PN63/PN100 Form B1 EN1092	L00_	•	
	DN50 PN100 Form B1 EN1092	M00_	•	
	DN80 PN100 Form B1 EN1092	N00_	•	
	DN100 PN100 Form B1 EN1092	P00_	•	
	DN150 PN63 Form B1 EN1092	R00_	•	
DN150 PN100 Form B1 EN1092	S00_	•		
Process Connection ASME	3/4" NPT	010_	•	
	1" NPT	020_	•	
	1 1/2" NPT	030_	•	
	1" 150 lb RF ASME B16.5	040_	•	
	1 1/2" 150 lb RF ASME B16.5	050_	•	
	1 1/2" 300 lb RF ASME B16.5	060_	•	
	2" 150 lb RF ASME B16.5	070_	•	
	2" 300 lb RF ASME B16.5	080_	•	
	3" 150 lb RF ASME B16.5	0A0_	•	
	3" 300 lb RF ASME B16.5	0B0_	•	
	4" 150 lb RF ASME B16.5	0C0_	•	
	4" 300 lb RF ASME B16.5	0D0_	•	
	6" 150 lb RF ASME B16.5	0E0_	•	
	8" 150 lb RF ASME B16.5	0F0_	•	
	6" 300 LBS RF ASME B16.5	0G0_	•	
	1" 600LBS RF ASME B16.5	0M0_	•	
	1" 1/2 600LBS RF ASME B16.5	0N0_	•	
	2" 600LBS RF ASME B16.5	0P0_	•	
	3" 600LBS RF ASME B16.5	0R0_	•	
	4" 600LBS RF ASME B16.5	0S0_	•	
	1" 900LBS/1500LBS RF ASME B16.5	0T0_	•	
	1" 1/2 900LBS/1500LBS RF ASME B16.5	0U0_	•	
	2" 900LBS/1500LBS RF ASME B16.5	0V0_	•	
	3" 900LBS RF ASME B16.5	0W0_	•	
	4" 900LBS RF ASME B16.5	0X0_	•	
	Process Connection Other	10K 40A RF JIS B2220	005_	•
		10K 50A RF JIS B2220	006_	•
10K 80A RF JIS B2220		007_	•	
10K 100A RF JIS B2220		008_	•	
Output	Output: 4...20mA (Hart)	___0	•	
	1 Output: 4...20mA (Hart) + Interface	___1	•	
	2 Outputs 4...20mA (Hart) + 4...20mA	___2	•	
	2 Outputs 4...20mA (Hart) + 4...20mA + Interface	___3	•	

TABLE IV

		Selection	Availability
Housing/Cable Entry/Cable gland	Aluminum / M20 x 1.5 / without Aluminum / 1/2" NPT / without Aluminum / G1/2" / without Aluminum / M20 x 1.5 / Plastic (Non-Ex: black, Ex i: blue) Aluminum / M20 x 1.5 / Metal (only for Ex d devices) Stainless Steel / M25 x 1.5 / without Stainless Steel / 1/2" NPT / without Stainless Steel / M25 x 1.5 / plastic M20 (Non-Ex: Black, Exi blue) Stainless Steel / M25 x 1.5 / metal M20 (only for Ex d devices)	0 ____ 1 ____ 2 ____ 3 ____ 4 ____ A ____ B ____ D ____ E ____	• • • • • • • • •
Housing Option	None Weather Protection Remote Version / 2 m (2180mm; 6.56 ft.) Remote Version / 4.5 m (4720 mm; 14.76 ft.) Remote Version / 9.5 m (9800 mm; 31.17 ft.) Remote Version / 14.5 m (14880 mm; 47.57 ft.) Remote Version / 2 m (2180 mm; 6.56 ft.) + Weather Protection Remote Version / 4.5 m (4720 mm; 14.76 ft.) + Weather Protection Remote Version / 9.5 m (9800 mm; 31.17 ft.) + Weather Protection Remote Version / 14.5 m (14880 mm; 47.57 ft.) + Weather Protection	0 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ A ____ B ____ C ____ D ____	• • s t u v s t u v
HMI (display & keys)	None English German French Italian Spanish Portugese Japanese Chinese (Mandarin) Russian	0 ____ 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ 8 ____ A ____	• • • • • • • • • •
Version	Honeywell	V ____	•
Special Option	None ESD Protection 30 KV Metaglas® (dual process sealing system for dangerous products)	0 ____ 1 ____ 2 ____	• • •

For Available Probe Lengths based on the remote electronics selected, refer to the length table.

TABLE V

Calibration Certificates	None Calibration certificate 2 points (Coax min. probe length 410mm / 1.35 ft.) Calibration certificate 5 points (Coax min. probe length 1910mm / 6.26 ft.)	000 ____ 001 ____ 002 ____	• • •
Drawing / Tag Number	None Tag No. stainless steel plate (1 line: 12 characters)	00 ____ 02 ____	• •

TABLE VI

Probe Length	Ordered in 100mm increments, minimum length 1000mm	00 ____	•
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RESTRICTIONS

Restrictions		Available only with		Not Available with	
Letter	Table	Selection	Table	Selection	
a			IV	4 _____, E _____	
b			II	__3 ____, __4 ____, __5 ____, __7 ____, __M ____, __S ____, __1 ____, __2 ____, __4 ____, __A ____, __B ____,	
c	II	___0_			
d	II	___0_	III	100_, 200_, 400_, 500_, K00_, L00_, 010_, 020_, 040_, 050_, 060_, 0M0_, 0N0_, 0T0_, 0U0_, 005_	
			IV	___1	
e	II	___0_	IV	___1	
f			II	___0_, __1 ____, __2 ____, __4 _	
g			II	___0_, __3 ____, __4 ____, ___4	
			III	100_, 200_, 400_, K00_, 010_, 020_, 040_, 0M0_, 0T0_, __1 ____, __3	
			IV	_5 ____, _6 ____, _C ____, _D __	
h	II	___4 ____, __A ____, ___C _			
			III	100_, 200_, 400_, 500_, K00_, L00_, 010_, 020_, 040_, 050_, 060_, 0M0_, 0N0_, 0T0_, 0U0_, 005_	
			IV	___1	
n			II	__M ____, __S __	
			III	100_, 200_, 300_, 400_, 500_, 600_, 700_, 800_, A00_, B00_, C00_, D00_, E00_, F00_, K00_, L00_, M00_, N00_, P00_, R00_, S00_	
	IV	0 _____, 1 _____, 4 _____	IV	___1	
p			III	___A, ___B, ___D, ___E	
			IV	3 _____, B _____, D _____, ___1	
q			II	__M ____, __S __	
			III	100_, 200_, 300_, 400_, 500_, 600_, 700_, 800_, A00_, B00_, C00_, D00_, E00_, F00_, K00_, L00_, M00_, N00_, P00_, R00_, S00_	
	IV	0 _____, 1 _____, 3 _____,	IV	___1	
r			IV	4 _____, B _____, E _____, ___1	

Additional restrictions can be found on page 4

RESTRICTIONS

Restrictions		Available only with		Not Available with	
Letter	Table	Selection	Table	Selection	
s	II	__ 0 __, __ 1 __, __ M __			
	IV	maximum probe length 4 m			
		or			
	II	__ 2 __, __ S __			
	IV	maximum probe length 6 m			
		or			
	II	__ 5 __			
	IV	maximum probe length 8 m			
		or			
t	II	__ 3 __, __ 4 __, __ 7 __			
	IV	maximum probe length 30 m			
	II	__ 0 __, __ 1 __, __ M __			
	IV	maximum probe length 4 m			
		or			
	II	__ 2 __, __ S __			
	IV	maximum probe length 6 m			
		or			
	II	__ 5 __			
IV	maximum probe length 8 m				
u		or			
	II	__ 3 __, __ 4 __, __ 7 __			
	IV	maximum probe length 25 m			
	II	__ 0 __, __ 1 __, __ M __			
	IV	maximum probe length 4 m			
		or			
	II	__ 2 __, __ S __			
	IV	maximum probe length 6 m			
		or			
II	__ 5 __				
IV	maximum probe length 8 m				
v		or			
	II	__ 3 __, __ 4 __, __ 7 __			
	IV	maximum probe length 15 m			
	II	__ 0 __, __ 1 __, __ M __			
	IV	maximum probe length 4 m			
		or			
	II	__ 2 __, __ S __			
	IV	maximum probe length 5 m			
		or			
II	__ 5 __				
IV	maximum probe length 5 m				
	or				
II	__ 3 __, __ 4 __, __ 7 __				
IV	maximum probe length 5 m				
w			IV	4 __ __, B __ __, E __ __, __ 1	
x	II	__ 0 __	III	1 0 0 __, 4 0 0 __, K 0 0 __, 0 1 0 __, 0 4 0 __, 0 M 0 __, 0 T 0 __,	
z	II	__ 3 __			