CERTIFICATE

1 EU – Type Examination Certificate

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU

3 EU – Type Examination Certificate Number: **KIWA 19ATEX0013 X Issue: 1**

4 Product: **Radar Level Transmitters, models LR54, LR64, LR74, LR65 and LR75 Free Space Radar**

5 Manufacturer: **Schneider Electric Systems USA, Inc.**

6 Address: **38 Neponset Avenue, Foxboro, MA 02035**
United States of America

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Kiwa Nederland B.V., Notified Body number 0620 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential ATEX Assessment Report No. 190100958.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0 : 2012 + A11 : 2013 **EN 60079-1 : 2014** **EN 60079-11 : 2012**
EN 60079-26 : 2015 **EN 60079-31 : 2014**

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU – Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

II 1/2 G	Ex ia IIC T6…T* Ga/Gb
II 1/2 D	Ex ia IIIC T85 °C…T* °C Da/Db
II 1/2 G	Ex db ia IIC T6…T* Ga/Gb
II 1/2 D	Ex ia tb IIIC T85 °C…T* °C Da/Db

T* and T* °C are detailed in the equipment model codes in Annex 1

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Kiwa Nederland B.V.

Ronald Karel
Managing Director

Issue date: 1 March 2019

First issue: -

This certificate shall, as far as applicable, be revised before the date of cessation of presumption of conformity of (one of) the included standards above as communicated in the Official Journal of the European Union.

13 **SCHEDULE**

14 **EU – Type Examination Certificate KIWA 19ATEX0013 X Issue No. 1**

15.1 **Description of Product**

The Radar Level Transmitters, models LR54, LR64, LR74, LR65 and LR75 Free Space Radar (detailed model codes are given in Annex 1) are used for continuous level measurement of flammable or non-flammable liquids or solid particles, granulates or powders in storage tanks, process tanks or stilling wells.

The electronics insert in the compartment which is connected to the process is in type of protection intrinsic safety "i" and the terminal compartment is in type of protection flameproof enclosures "d" and/or protection by enclosure "t" or intrinsic safety "i".

The electronics enclosure can be of aluminium or stainless steel.

Optionally, the transmitter may be provided with display and adjustment capabilities (HMI option).

Ambient temperature range: -40 °C to +75 °C (see also specific conditions of use).

The degree of protection of the transmitter is IP66/IP68 in accordance with EN 60529.

15.2 **Electrical Data**

Terminals +/- of apparatus in type of protection intrinsic safety "ia", only for connection to a certified intrinsically-safe circuit with the following maximum values:
U_i = 30 Vdc, I_i = 130 mA, P_i = 1 W, C_i = 10 nF, L_i = 0 µH

Terminals +/- of apparatus with terminal compartment in type of protection flameproof enclosures "d" and dust ignition protection by enclosure "t" with the following maximum values:
U_N = 36 Vdc, I_N = 22 mA, U_m = 250 Vac

15.3 **Thermal data**

Refer to Annex 1.

15.4 **Instructions**

The instructions provided with the product shall be obeyed to ensure safe operation.

16 **ATEX Assessment Report Number**

No. 190100958.

17 **Specific Conditions of Use**

- The flameproof joints are not intended to be repaired;
- Build-up of electrostatic charge on the painted enclosure and external plastic parts shall be avoided by suitable measures.
- The stainless steel enclosure may only be used with level transmitters in type of protection intrinsic safety, Ex ia IIC.
- Refer to manuals MI 023-101 and MI 023-102 for detailed information on the relation between the ambient temperature range, process temperature range and the temperature class T* and the maximum surface temperature T* °C.

13 # SCHEDULE

14 **EU – Type Examination Certificate KIWA 19ATEX0013 X Issue No. 1**

18 **Essential Health and Safety Requirements**

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

19 **Drawings and Documents**

As listed in ATEX Assessment Report No. 190100958.

Equipment model code

LR54 Free Space Radar
The complete type designation is as follows:
LR540abcdefghijklmnopqrst or **LR544abcdefghijklmnopqrst** or **LR549abcdefghijklmnopqrst**
The letter 'a' to 't' are replaced as a function of the ordered options detailed below (options not Ex relevant are not detailed).

a Version
- F: SCHNEIDER ELECTRIC

b Regional Directives (one digit, not safety relevant)

c Ex Approvals
- 1: ATEX II 1/2 G Ex ia IIC T6…T* Ga/Gb + II 1/2 D Ex ia IIIC T*°C Da/Db
- 2: ATEX II 1/2 G Ex db ia IIC T6…T* Ga/Gb + II 1/2 D Ex ia tb IIIC T*°C Da/Db

d Industry / Safety (one digit, not safety relevant)

e Construction (one digit, not safety relevant)

f Converter version (Housing material / IP class)
- 2: Compact version (Aluminium housing - IP66/IP68 0.1 barg)
- 3: Compact version (Stainless steel housing - IP66/IP68 0.1 barg)

g Output
- 1: 2 wires / 4...20mA passive HART

h Cable entry / Cable gland
- 1: M20x1,5 / Without
- 2: M20x1,5 / Plastic + plug
- 3: M20x1.5 / Nickel-plated brass + plug
- 4: M20x1.5 / Stainless Steel + plug
- 5: M20x1.5 / M12 (4-pin connector) + plug
- 6: M20x1.5 / 2 x Plastic
- 7: M20x1.5 / 2 x Nickel-plated brass
- 8: M20x1.5 / 2 x Stainless Steel
- A: M20x1.5 / 2 x M12 (4-pin connector)
- C: 1/2 NPT / Without
- D: 1/2 NPT / Nickel-plated brass + plug
- E: 1/2 NPT / Stainless Steel + plug
- F: 1/2 NPT / 2 x Nickel-plated brass
- G: 1/2 NPT / 2 x Stainless Steel

i Display
- 0: Without (No display, blind cover)
- 4: Display -Vertical Top

j Operating language (one digit, not safety relevant)

k Enhanced functions (one digit, not safety relevant)

l Process conditions / Process seal
- 1: -1...16 barg (-14.5…232 psig) / -40°C...+130°C (-40°F…+266°F) / FKM, FPM
- 2: -1...16 barg (-14.5…232 psig) / -50°C...+130°C (-58°F…+266°F) / EPDM
- 3: -1...16 barg (-14.5…232 psig) / -20°C...+130°C (-4°F…+266°F) / KALREZ® 6375

m Antennas
- 1: 316 L / Metallic horn DN40 (1.5") TLPR
- 2: 316 L / Metallic horn DN50 (2") TLPR
- 3: 316 L / Metallic horn DN65 (2.5") TLPR
- 4: 316 L / Metallic horn DN80 (3") LPR
- 5: 316 L / Metallic horn DN100 (4") LPR
- 6: 316 L / Metallic horn DN150 (6") LPR
- 7: 316 L / Metallic horn DN200 (8") LPR
- A: PP / Drop DN80 (3") LPR
- B: PP / Drop DN100 (4") LPR
- C: PP / Drop DN150 (6") LPR

n Antenna extensions / Flange plate protection
- 0: Without

1: 316 L / 105 mm (4") for Horn and Drop antennas
2: 316 L / 210 mm (8") for Horn and Drop antennas
3: 316 L / 315 mm (12") for Horn and Drop antennas
4: 316 L / 420 mm (16") for Horn and Drop antennas
5: 316 L / 525 mm (20") for Horn and Drop antennas
6: 316 L / 630 mm (24") for Horn only
7: 316 L / 735 mm (29") for Horn only
8: 316 L / 840 mm (33") for Horn only
A: 316 L / 945 mm (37") for Horn only
B: 316 L / 1050 mm (41") for Horn only
D: Without / With flange protection
E: PP / 105 mm (4") for PP Drop with flange plate protection
F: PP / 210 mm (8") for PP Drop with flange plate protection
G: PP / 315 mm (12") for PP Drop with flange plate protection
H: PP / 420 mm (16") for PP Drop with flange plate protection
K: PP / 525 mm (20") for PP Drop with flange plate protection

o Process connection size

F:	DN25	-	1"	-	25A
G:	DN40	-	1-1/2"	-	40A
H:	DN50	-	2"	-	50A
L:	DN80	-	3"	-	80A
M:	DN100	-	4"	-	100A
P:	DN150	-	6"	-	150A
R:	DN200	-	8"	-	200A

p Process connection
1: 150 lbs ASME B 16.5
2: 300 lbs ASME B 16.5
7: 15 psig ASME B 16.5
A: NPT threaded - B1.20.1
C: PN01 EN 1092-1
E: PN16 EN 1092-1
G: PN40 EN 1092-1
P: GA threaded ISO228
U: JIS 10K B 2220

q Process connection Sealing Face / Hygienic
0: Without
1: Standard Type B1 EN 1092-1
7: Type A EN 1092-1 (flat face)
A: RF ASME B 16.5 (raised face)
B: FF ASME B 16.5 (flat face)
P: RF JIS B2220 (raised face)

r Calibration certificate (one digit, not safety relevant)

s Options
0: Without
2: Purging (for metallic Horn antenna only)

t Accessories / TAG plate (one digit, not safety relevant)

Note: T*= T5 or T4, T*°C = T85°C…T100°C or T85°C…T130°C.

<u>LR64 Free Space Radar</u>
The complete type designation is as follows:
LR640abcdefghijklmnopqrst or **LR644abcdefghijklmnopqrst** or **LR649abcdefghijklmnopqrst**
The letter ‘a’ to ‘t’ are replaced as a function of the ordered options detailed below (options not Ex relevant are not detailed).

a Version
F: SCHNEIDER ELECTRIC

b Regional Directives (one digit, not safety relevant)
c Ex Approvals
- 1: ATEX II 1/2 G Ex ia IIC T6…T* Ga/Gb + II 1/2 D Ex ia IIIC T*°C Da/Db
- 2: ATEX II 1/2 G Ex db ia IIC T6…T* Ga/Gb + II 1/2 D Ex ia tb IIIC T*°C Da/Db

d Industry / Safety (one digit, not safety relevant)
e Construction (one digit, not safety relevant)
f Converter version (Housing material / IP class)
- 2: Compact version (Aluminium housing - IP66/IP68 0.1 barg)
- 3: Compact version (Stainless steel housing - IP66/IP68 0.1 barg)

g Output
- 1: 2 wires / 4...20mA passive HART

h Cable entry / Cable gland
- 1: M20x1,5 / Without
- 2: M20x1,5 / Plastic + plug
- 3: M20x1.5 / Nickel-plated brass + plug
- 4: M20x1.5 / Stainless Steel + plug
- 5: M20x1.5 / M12 (4-pin connector) + plug
- 6: M20x1.5 / 2 x Plastic
- 7: M20x1.5 / 2 x Nickel-plated brass
- 8: M20x1.5 / 2 x Stainless Steel
- A: M20x1.5 / 2 x M12 (4-pin connector)
- C: 1/2 NPT / Without
- D: 1/2 NPT / Nickel-plated brass + plug
- E: 1/2 NPT / Stainless Steel + plug
- F: 1/2 NPT / 2 x Nickel-plated brass
- G: 1/2 NPT / 2 x Stainless Steel

i Display
- 0: Without (No display, blind cover)
- 4: Display -Vertical Top

j Operating language (one digit, not safety relevant)
k Enhanced functions (one digit, not safety relevant)
l Process conditions / Process seal
- 1: -1...16 barg (-14.5…232 psig) / -40°C...+130°C (-40°F…+266°F) / FKM, FPM
- 2: -1...16 barg (-14.5…232 psig) / -50°C...+130°C (-58°F…+266°F) / EPDM
- 3: -1...16 barg (-14.5…232 psig) / -20°C...+130°C (-4°F…+266°F) / KALREZ® 6375

m Antennas
- 0: Without
- 4: 316 L / Metallic horn DN80 (3") LPR
- 5: 316 L / Metallic horn DN100 (4") LPR
- 6: 316 L / Metallic horn DN150 (6") LPR
- 7: 316 L / Metallic horn DN200 (8") LPR
- A: PP / Drop DN80 (3") LPR
- B: PP / Drop DN100 (4") LPR
- C: PP / Drop DN150 (6") LPR
- E: PTFE / Drop DN80 (3") LPR
- F: PTFE / Drop DN100 (4") LPR
- G: PTFE / Drop DN150 (6") LPR

n Antenna extensions / Flange plate protection
- 0: Without
- 1: 316 L / 105 mm (4") for Horn and Drop antennas
- 2: 316 L / 210 mm (8") for Horn and Drop antennas
- 3: 316 L / 315 mm (12") for Horn and Drop antennas
- 4: 316 L / 420 mm (16") for Horn and Drop antennas
- 5: 316 L / 525 mm (20") for Horn and Drop antennas
- 6: 316 L / 630 mm (24") for Horn only
- 7: 316 L / 735 mm (29") for Horn only
- 8: 316 L / 840 mm (33") for Horn only
- A: 316 L / 945 mm (37") for Horn only

B: 316 L / 1050 mm (41") for Horn only

o Process connection size

0:	Without				
F:	DN25	-	1"	-	25A
G:	DN40	-	1-1/2"	-	40A
L:	DN80	-	3"	-	80A
M:	DN100	-	4"	-	100A
P:	DN150	-	6"	-	150A
R:	DN200	-	8"	-	200A

p Process connection Pressure class

0:	Without
1:	150 lbs ASME B 16.5
2:	300 lbs ASME B 16.5
7:	15 psig ASME B 16.5
A:	NPT threaded - B1.20.1
C:	PN01 EN 1092-1
D:	PN10 EN 1092-1
E:	PN16 EN 1092-1
G:	PN40 EN 1092-1
P:	GA threaded ISO228
U:	JIS 10K B 2220

q Process connection Sealing Face / Hygienic

0:	Without
1:	Standard Type B1 EN 1092-1
7:	Type A EN 1092-1 (flat face)
A:	RF ASME B 16.5 (raised face)
B:	FF ASME B 16.5 (flat face)
P:	RF JIS B2220 (raised face)

r Calibration certificate (one digit, not safety relevant)

s Options

0:	Without
2:	Purging (for metallic Horn antenna only)

t Accessories / TAG plate (one digit, not safety relevant)

Note: T*= T5 or T4, T*°C = T85°C…T100°C or T85°C…T130°C.

LR74 Free Space Radar

The complete type designation is as follows:
LR740abcdefghijklmnopqrst or **LR744abcdefghijklmnopqrst** or **LR749abcdefghijklmnopqrst**
The letter ‘a’ to ‘t’ are replaced as a function of the ordered options detailed below (options not Ex relevant are not detailed).

a Version

F:	SCHNEIDER ELECTRIC

b Regional Directives (one digit, not safety relevant)

c Ex Approvals

1:	ATEX II 1/2 G Ex ia IIC T6…T3 Ga/Gb + II 1/2 D Ex ia IIIC T*°C Da/Db
2:	ATEX II 1/2 G Ex db ia IIC T6…T3 Ga/Gb + II 1/2 D Ex ia tb IIIC T*°C Da/Db

d Industry / Safety (one digit, not safety relevant)

e Construction (one digit, not safety relevant)

f Converter version (Housing material / IP class)

2:	Compact version (Aluminium housing - IP66/IP68 0.1 barg)
3:	Compact version (Stainless steel housing - IP66/IP68 0.1 barg)

g Output

1:	2 wires / 4...20mA passive HART

h Cable entry / Cable gland

1:	M20x1,5 / Without

2: M20x1,5 / Plastic + plug
3: M20x1.5 / Nickel-plated brass + plug
4: M20x1.5 / Stainless Steel + plug
5: M20x1.5 / M12 (4-pin connector) + plug
6: M20x1.5 / 2 x Plastic
7: M20x1.5 / 2 x Nickel-plated brass
8: M20x1.5 / 2 x Stainless Steel
A: M20x1.5 / 2 x M12 (4-pin connector)
C: 1/2 NPT / Without
D: 1/2 NPT / Nickel-plated brass + plug
E: 1/2 NPT / Stainless Steel + plug
F: 1/2 NPT / 2 x Nickel-plated brass
G: 1/2 NPT / 2 x Stainless Steel

i Display
0: Without (No display, blind cover)
4: Display -Vertical Top

j Operating language (one digit, not safety relevant)

k Enhanced functions (one digit, not safety relevant)

l Process conditions / Process seal
1: -1…40 barg (-14.5…580 psig) / -40°C...+200°C (-40°F…+392°F) / FKM, FPM
2: -1…40 barg (-14.5…580 psig) / -50°C...+150°C (-58°F…+302°F) / EPDM
3: -1…40 barg (-14.5…580 psig) / -20°C...+200°C (-4°F…+392°F) / KALREZ® 6375
5: -1…40 barg (-14.5…580 psig) / -30°C...+200°C (-22°F…+392°F) / FKM, FPM + Metaglas®
6: -1…40 barg (-14.5…580 psig) / -30°C...+150°C (-22°F…+302°F) / EPDM + Metaglas®
7: -1…40 barg (-14.5…580 psig) / -20°C...+200°C (-4°F…+392°F) / KALREZ® 6375 + Metaglas®
A: -1…100 barg (-14.5…1450 psig) / -40°C...+200°C (-40°F…+392°F) / FKM, FPM
B: -1…100 barg (-14.5…1450 psig) / -50°C...+150°C (-58°F…+302°F) / EPDM
C: -1…100 barg (-14.5…1450 psig) / -20°C...+200°C (-4°F…+392°F) / KALREZ® 6375
E: -1…100 barg (-14.5…1450 psig) / -30°C...+200°C (-22°F…+392°F) / FKM, FPM + Metaglas®
F: -1…100 barg (-14.5…1450 psig) / -30°C...+150°C (-22°F…+302°F) / EPDM + Metaglas®
G: -1…100 barg (-14.5…1450 psig) / -20°C...+200°C (-4°F…+392°F) / KALREZ® 6375 + Metaglas®

m Antennas
0: Without
1: 316 L / Metallic horn DN40 (1.5") TLPR
2: 316 L / Metallic horn DN50 (2") TLPR
3: 316 L / Metallic horn DN65 (2.5") TLPR
4: 316 L / Metallic horn DN80 (3") LPR
5: 316 L / Metallic horn DN100 (4") LPR
6: 316 L / Metallic horn DN150 (6") LPR
7: 316 L / Metallic horn DN200 (8") LPR
E: PTFE / Drop DN80 (3") LPR
F: PTFE / Drop DN100 (4") LPR
G: PTFE / Drop DN150 (6") LPR
K: PEEK / Drop DN80 (3") LPR
L: PEEK / Drop DN100 (4") LPR
M: PEEK / Drop DN150 (6") LPR
Y: PEEK / Hygienic antenna

n Antenna extensions / Flange plate protection
0: Without
1: 316 L / 105 mm (4") for Horn and Drop antennas
2: 316 L / 210 mm (8") for Horn and Drop antennas
3: 316 L / 315 mm (12") for Horn and Drop antennas
4: 316 L / 420 mm (16") for Horn and Drop antennas
5: 316 L / 525 mm (20") for Horn and Drop antennas

6: 316 L / 630 mm (24") for Horn only
7: 316 L / 735 mm (29") for Horn only
8: 316 L / 840 mm (33") for Horn only
A: 316 L / 945 mm (37") for Horn only
B: 316 L / 1050 mm (41") for Horn only
D: Without / With flange protection
M: PTFE / 105 mm (4") for PTFE Drop with flange plate protection
N: PTFE / 210 mm (8") for PTFE Drop with flange plate protection
P: PTFE / 315 mm (12") for PTFE Drop with flange plate protection
S: PEEK / 105 mm (4") for PEEK Drop with flange plate protection
T: PEEK / 210 mm (8") for PEEK Drop with flange plate protection
U: PEEK / 315 mm (12") for PEEK Drop with flange plate protection

o Process connection size
0: Without
G: DN40 - 1-1/2" - 40A
H: DN50 - 2" - 50A
L: DN80 - 3" - 80A
M: DN100 - 4" - 100A
P: DN150 - 6" - 150A
R: DN200 - 8" - 200A

p Process connection Pressure class
0: Without
1: 150 lbs ASME B 16.5
2: 300 lbs ASME B 16.5
3: 600 lbs ASME B 16.5
4: 900 lbs ASME B 16.5
5: 1500 lbs ASME B 16.5
7: 15 psig ASME B 16.5
A: NPT threaded - B1.20.1
C: PN01 EN 1092-1
E: PN16 EN 1092-1
G: PN40 EN 1092-1
H: PN63 EN 1092-1
K: PN100 EN 1092-1
P: GA threaded ISO228
U: JIS 10K B 2220

q Process connection Sealing Face / Hygienic
0: Without
1: Standard Type B1 EN 1092-1
2: Standard Type B2 EN 1092-1 (Roughness acc. to customer requirement)
3: Type C EN 1092-1 (tongue)
4: Type D EN 1092-1 (groove)
5: Type E EN 1092-1 (male)
6: Type F EN 1092-1 (female)
7: Type A EN 1092-1 (flat face)
A: RF ASME B 16.5 (raised face)
B: FF ASME B 16.5 (flat face)
M: RJ ASME B 16.5 (ring joint)
P: RF JIS B2220 (raised face)
S: Triclamp ISO 2852
T: DIN 11851
U: SMS 1145
V: Varivent® Type N
W: Neumo Biocontrol®
X: DIN 11864-1 Form A

r Calibration certificate (one digit, not safety relevant)

s Options
0: Without

1: Heating / Cooling (for metallic Horn antenna only)
2: Purging (for metallic Horn antenna only)
3: Heating / Cooling + purging (for metallic Horn antenna only)

t Accessories / TAG plate (one digit, not safety relevant)

Note: T*°C = T85°C…T150°C or T85°C…T200°C

LR65 Free Space Radar

The complete type designation is as follows:
LR650abcdefghijklmnopqrst or **LR654abcdefghijklmnopqrst** or **LR659abcdefghijklmnopqrst**
The letter 'a' to 't' are replaced as a function of the ordered options detailed below (options not Ex relevant are not detailed).

a Version
F: SCHNEIDER ELECTRIC
b Regional Directives (one digit, not safety relevant)
c Ex Approvals
1: ATEX II 1/2 G Ex ia IIC T6…T3 Ga/Gb + II 1/2 D Ex ia IIIC T*°C Da/Db
2: ATEX II 1/2 G Ex db ia IIC T6…T3 Ga/Gb + II 1/2 D Ex ia tb IIIC T*°C Da/Db
d Industry / Safety (one digit, not safety relevant)
e Construction (one digit, not safety relevant)
f Converter version (Housing material / IP class)
2: Compact version (Aluminium housing - IP66/IP68 0.1 barg)
3: Compact version (Stainless steel housing - IP66/IP68 0.1 barg)
g Output
1: 2 wires / 4...20mA passive HART
h Cable entry / Cable gland
1: M20x1,5 / Without
2: M20x1,5 / Plastic + plug
3: M20x1.5 / Nickel-plated brass + plug
4: M20x1.5 / Stainless Steel + plug
5: M20x1.5 / M12 (4-pin connector) + plug
6: M20x1.5 / 2 x Plastic
7: M20x1.5 / 2 x Nickel-plated brass
8: M20x1.5 / 2 x Stainless Steel
A: M20x1.5 / 2 x M12 (4-pin connector)
C: 1/2 NPT / Without
D: 1/2 NPT / Nickel-plated brass + plug
E: 1/2 NPT / Stainless Steel + plug
F: 1/2 NPT / 2 x Nickel-plated brass
G: 1/2 NPT / 2 x Stainless Steel
i Display
0: Without (No display, blind cover)
4: Display -Vertical Top
j Display- documentation language (one digit, not safety relevant)
k Enhanced functions (one digit, not safety relevant)
l Process conditions / Process seal
1: -1…40 barg (-14.5…580 psig) / -40°C...+150°C (-40°F…+302°F) / FKM, FPM
2: -1…40 barg (-14.5…580 psig) / -50°C...+150°C (-58°F…+302°F) / EPDM
4: -1…40 barg (-14.5…580 psig) / -40°C...+200°C (-40°F…+392°F) / FKM, FPM
m Antennas
3: PEEK / Lens DN40 (1.5") LPR
4: PEEK / Lens DN70 (2.75") LPR
n Antenna extensions
0: Without
1: 316 L / 112 mm (4.4") for Lens Ø 40 mm (1.5")
o Process connection size

G:	DN40	-	1-1/2"	-	40A
H:	DN50	-	2"	-	50A
L:	DN80	-	3"	-	80A
M:	DN100	-	4"	-	100A
P:	DN150	-	6"	-	150A
R:	DN200	-	8"	-	200A

p Process connection Pressure class
- 1: 150 lbs ASME B 16.5
- 2: 300 lbs ASME B 16.5
- 7: 15 psig ASME B 16.5
- A: NPT threaded - B1.20.1
- C: PN01 EN 1092-1
- D: PN10 EN 1092-1
- E: PN16 EN 1092-1
- G: PN40 EN 1092-1
- P: GA threaded ISO228
- U: JIS 10K B 2220

q Process connection Sealing Face / Hygienic
- 0: Without
- 1: Standard Type B1 EN 1092-1
- 7: Type A EN 1092-1 (flat face)
- A: RF ASME B 16.5 (raised face)
- B: FF ASME B 16.5 (flat face)
- P: RF JIS B2220 (raised face)

r Calibration certificate (one digit, not safety relevant)

s Options
- 0: Without
- 2: Purging

t Accessories / TAG plate (one digit, not safety relevant)

Note: T*°C = T85°C…T150°C or T85°C…T200°C

<u>LR75 Free Space Radar</u>
The complete type designation is as follows:
LR750abcdefghijklmnopqrst or **LR754abcdefghijklmnopqrst** or **LR759abcdefghijklmnopqrst**
The letter ‘a’ to ‘t’ are replaced as a function of the ordered options detailed below (options not Ex relevant are not detailed).

a Version
- F: SCHNEIDER ELECTRIC

b Regional Directives (one digit, not safety relevant)

c Ex Approvals
- 1: ATEX II 1/2 G Ex ia IIC T6…T3 Ga/Gb + II 1/2 D Ex ia IIIC T*°C Da/Db
- 2: ATEX II 1/2 G Ex db ia IIC T6…T3 Ga/Gb + II 1/2 D Ex ia tb IIIC T*°C Da/Db

d Industry / Safety (one digit, not safety relevant)

e Construction (one digit, not safety relevant)

f Converter version (Housing material / IP class)
- 2: Compact version (Aluminium housing - IP66/IP68 0.1 barg)
- 3: Compact version (Stainless steel housing - IP66/IP68 0.1 barg)

g Output
- 1: 2 wires / 4...20mA passive HART

h Cable entry / Cable gland
- 1: M20x1,5 / Without
- 2: M20x1,5 / Plastic + plug
- 3: M20x1.5 / Nickel-plated brass + plug
- 4: M20x1.5 / Stainless Steel + plug
- 5: M20x1.5 / M12 (4-pin connector) + plug

6: M20x1.5 / 2 x Plastic
7: M20x1.5 / 2 x Nickel-plated brass
8: M20x1.5 / 2 x Stainless Steel
A: M20x1.5 / 2 x M12 (4-pin connector)
C: 1/2 NPT / Without
D: 1/2 NPT / Nickel-plated brass + plug
E: 1/2 NPT / Stainless Steel + plug
F: 1/2 NPT / 2 x Nickel-plated brass
G: 1/2 NPT / 2 x Stainless Steel

i Display
0: Without (No display, blind cover)
4: Display -Vertical Top

j Display- documentation language (one digit, not safety relevant)

k Enhanced functions (one digit, not safety relevant)

l Process conditions / Process seal
1: -1…40 barg (-14.5…580 psig) / -40°C...+150°C (-40°F…+302°F) / FKM, FPM
2: -1…40 barg (-14.5…580 psig) / -50°C...+150°C (-58°F…+302°F) / EPDM
3: -1…40 barg (-14.5…580 psig) / -20°C...+150°C (-4°F…+302°F) / KALREZ® 6375
4: -1…40 barg (-14.5…580 psig) / -50°C...+150°C (-58°F…+302°F) / PEEK
5: -1…40 barg (-14.5…580 psig) / -40°C...+200°C (-40°F…+392°F) / FKM, FPM
6: -1…40 barg (-14.5…580 psig) / -20°C...+200°C (-4°F…+392°F) / KALREZ® 6375
7: -1…40 barg (-14.5…580 psig) / -50°C...+200°C (-58°F…+392°F) / PEEK

m Antennas
1: PEEK / Lens DN20 (3/4") TLPR
2: PEEK / Lens DN25 (1") TLPR
3: PEEK / Lens DN40 (1.5") LPR
4: PEEK / Lens DN70 (2.75") LPR

n Antenna extensions
0: Without
1: 316 L / 112 mm (4.4") for Lens Ø 40 mm (1.5")
A: Without / With PEEK flange plate protection (only for lens Ø 40 mm (1.5") and DN70 (2.75"))

o Process connection size

E:	DN20	-	3/4"	-	15A
F:	DN25	-	1"	-	25A
G:	DN40	-	1-1/2"	-	40A
H:	DN50	-	2"	-	50A
L:	DN80	-	3"	-	80A
M:	DN100	-	4"	-	100A
P:	DN150	-	6"	-	150A
R:	DN200	-	8"	-	200A

p Process connection Pressure class
1: 150 lbs ASME B 16.5
2: 300 lbs ASME B 16.5
7: 15 psig ASME B 16.5
A: NPT threaded - B1.20.1
C: PN01 EN 1092-1
D: PN10 EN 1092-1
E: PN16 EN 1092-1
G: PN40 EN 1092-1
P: GA threaded ISO228
U: JIS 10K B 2220

q Process connection Sealing Face / Hygienic
0: Without
1: Standard Type B1 EN 1092-1
7: Type A EN 1092-1 (flat face)
A: RF ASME B 16.5 (raised face)
B: FF ASME B 16.5 (flat face)

P: RF JIS B2220 (raised face)

r Calibration certificate (one digit, not safety relevant)

s Options
- 0: Without
- 2: Purging

t Accessories / TAG plate (one digit, not safety relevant)

Note: T*°C = T85°C…T150°C or T85°C…T200°C