



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx KLCS 23.0029X	Page 1 of 4	<u>Certificate history:</u> Issue 0 (2023-12-08)
Status:	Current	Issue No: 1	
Date of Issue:	2026-08-03		
Applicant:	Rotex Manufacturers and Engineers Private Limited R-852/853, MIDC, TTC Industrial Area, Rabale, Maharashtra. Navi Mumbai 400 701 India		
Equipment:	Limit Switch / Position Transmitter (Transducer) , Model: DNLF Series		
Optional accessory:			
Type of Protection:	Flameproof enclosures “d” & Dust – Protection by enclosure “t”		
Marking:	Ex db IIB T6/T5 Gb (-20°C ≤ Ta ≤ +*°C) Ex db IIC T6/T5 Gb (-20°C ≤ Ta ≤ +*°C) Ex tb IIIC T85°C/T100°C Db (-20°C ≤ Ta ≤ +*°C) (* Refer Table 1 in Equipment section of this certificate for Relationship between temperature class / maximum surface temperature and ambient temperature.)		

Approved for issue on behalf of the IECEx
Certification Body:

Vikram Paranjpe

Position:

Dy. Director (Operations)

Signature:
(for printed version)

Date:
(for printed version)

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Certificate issued by:

Karandikar Laboratories Certification Services
Gat No. 142, Boisar Chillar Rd.,
Opp. Union Park, At Betegaon,
Boisar (E), Tal- Palghar
Maharashtra 401501
India





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Manufacturer: **Rotex Manufacturers and Engineers Private Limited**
R-852/853, MIDC, TTC Industrial Area,
Rabale, Maharashtra.
Navi Mumbai 400 701
India

Manufacturing locations: **Rotex Manufacturers and Engineers Private Limited**
R-852/853, MIDC, TTC Industrial Area,
Rabale, Maharashtra.
Navi Mumbai 400 701
India

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

IN/KLCS/ExTR23.0042/00 **IN/KLCS/ExTR23.0042/01**

Quality Assessment Reports:

IN/KLCS/QAR23.0008/00 **IN/KLCS/QAR23.0008/01**



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

DNLF series Limit Switch / Position Transmitter (Transducer) comprises a rectangular enclosure manufactured from aluminium alloy grade LM6, stainless-steel grade SS316(CF8M) or SS316L(CF3M) material.

The enclosure is in two halves and held together by 8 stainless steel fasteners of grade A2-70. An operating rod passes through the cover and housing forming cylindrical joints.

The Limit Switch has a cam attached to operate micro switches within the enclosure.

The Position Transmitter (Transducer) has a gear which may be attached to the operating rod to drive potentiometer or sensor.

The Limit Switch and Position Transmitter may be combined together within the enclosure.

An external visual device may be included to indicate the rotary position of the operating rod covered by a polycarbonate dome (indicator).

The bottom housing has provision for maximum 4 cable entries and tapped holes for mounting. The Limit Switch / Position Transmitter (Transducer) is rated up to 250 VAC / 250VDC and 10 amperes.

Temperature class / Maximum Surface temperature:

Table 1

Ambient temperature	*Temperature class (Group IIB or IIC)	*Maximum surface temperature (Group IIIC)
+60°C	T6	T85°C
+70°C	T5	T100°C

For Type Designation please refer ANNEX to IECEx KLCS 23.0029X Issue 1.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The manufacturer has maintained larger flamepath length, more stringent gap and more number of engaged threads than required by the standard. Hence, in order to avoid the possibility of transmission of an internal explosion to the external potentially explosive atmosphere, contact the manufacturer when repair of this flamepath is necessary.
- In order to avoid the possibility of transmission of an internal explosion to the external potentially explosive atmosphere, the fastening screws shall be stainless-steel socket head cap screws having property class A2-70 with minimum yield strength of 450MPa.
- For Group III applications, in order to avoid the possibility of exceeding the assigned maximum surface temperature, dust layers shall be prevented from building up on the outside surface of the enclosure, and the enclosure shall be routinely cleaned.
- In order to avoid electrostatic charging, the Ex Equipment shall only be installed in areas where charging mechanisms stronger than manual rubbing can be excluded. Cleaning of non-metallic surface must be done with a damp cloth.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- 1) Addition of Model for Gas Group IIC.
- 2) Addition of additional material of construction SS316L (CF3M) for all models.
- 3) Re-wording of Specific Conditions of Use to meet the requirements of OD 009.

Annex:

[ANNEX TO IECEx KLCS 23.0029X Issue 1.pdf](#)



ANNEX to IECEx KLCS 23.0029X, Issue No. 1

Date: 03.08.2026

Type designation:

ORDERING CODE											
01	02	03	04	05	06	07	08	09	10	11	12
DNLF	1A	2	PT	4R	*	*	Y	*	*	A	

01 LIMIT SWITCH TYPE		02 MODEL CODE ①		03 NUMBER OF SWITCHES		04 PTR	
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION
DNLF	FLAMEPROOF	1A	ROLLER LEVER TYPE MICROSWITCHES (SPDT SWITCH)	1	1	*	WITHOUT PTR
		2A	CYLINDRICAL PROXY SENSOR	2	2	PT	WITH PTR ③
		3A	FLAT TYPE PROXY SENSOR	3	3		
		4A	SLOT TYPE PROXY SENSOR	4	4		
		5A	ROLLER LEVER TYPE MICROSWITCHES (DPDT SWITCH)	*	COUNTER CLOCKWISE②		
		6A	HERMITICALLY SEALED REED SWITCH	CW	CLOCKWISE ②		
		PTR-01	POSITION TRANSMITTER				
		PTR-02	SMART POSITIONER				

05 CABLE ENTRY SIZE		06 BODY COVER MATERIAL		07 COLOUR ④		08 INDICATOR ⑤	
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION
4R	1/2" NPT	*	ALUMINUM	*	BLACK	*	WITHOUT INDICATOR
6R	3/4" NPT	B5	CF8M	B	BLUE	Y	RED AND YELLOW
3M	M20 X 1.5	B6	CF3M	Y	YELLOW	G	RED AND GREEN
						3L	3 WAY L PORT
						3T	3 WAY T PORT

09 TEMPERATURE		10 CABLE ENTRY		11 CERTIFICATION ⑥		12 SPECIAL CUSTOMIZATION	
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION
*	T6 : -20°C TO +60°C T5 : -20°C TO +70°C	*	DUAL	CC	CCOE / PESO (IIB)	SUXX	--
		Q	4 ENTRY	A	ATEX /IECEx (IIB)		
				I	INMETRO (IIB)		
				S ⑥	SIL		
				CCC	CCOE / PESO (IIC)		
				AC	ATEX /IECEx (IIC)		
				IC	INMETRO (IIC)		

TABLE 06-01 : SWITCH MODEL-1A				
SR NO	MODEL CODE	SWITCH MODEL	SENSOR TYPE	MAKE
1	DNLF1A2	MICROSWITCH - V15S05-CZ100A05-01	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
2	DNLF11A2	MICROSWITCH - V7-1C17E9-201	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
3	DNLF61A2	MICROSWITCH - V15S05-CZ100A05-01	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
4	DNLF71A2	MICROSWITCH - 1HS1	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
5	DNLF81A2	MICROSWITCH (HERMATICALLY SEALED) - 11HM1	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
6	DNLF91A2	MICROSWITCH (HERMATICALLY SEALED) - 2HM19-1	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
7	DNLF101A2	MICROSWITCH (HERMATICALLY SEALED) - 4RV22-A28	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
8	DNLF111A2	MICROSWITCH (HERMATICALLY SEALED) - 4RV22-A29	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
9	DNLF121A2	MICROSWITCH (HERMATICALLY SEALED) - 13HM1	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
10	DNLF131A2	MICROSWITCH (HERMATICALLY SEALED) - 9HM1 (0.5AMP 28V DC)	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
11	DNLF141A2	MICROSWITCH (HERMATICALLY SEALED) - 5HM6 (4AMP 48V DC)	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
12	DNLF21A2	MICROSWITCH - V15T10-EZ200A05	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL



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TABLE 06-02 : SWITCH MODEL-2A				
SR NO	MODEL CODE	SWITCH MODEL	SENSOR TYPE	MAKE
1	DNLF2A2	NJ2-12GM-N	CYLINDRICAL PROXIMITY SENSOR	P & F
2	DNLF12A2	NCB2-12GM35-N0	CYLINDRICAL PROXIMITY SENSOR	P & F
3	DNLF22A2	NBN4-12GM40-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
4	DNLF32A2	NCN4-12GM35-N0	CYLINDRICAL PROXIMITY SENSOR	P & F
5	DNLF42A2	NJ4-12GM50-WO	CYLINDRICAL PROXIMITY SENSOR	P & F
6	DNLF52A2	NBN4-12GM40-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
7	DNLF72A2	NJ5-18GM-N-5M	CYLINDRICAL PROXIMITY SENSOR	P & F
8	DNLF82A2	NJ5-18GM-N	CYLINDRICAL PROXIMITY SENSOR	P & F
9	DNLF92A2	NJ5-18GK-N	CYLINDRICAL PROXIMITY SENSOR	P & F
10	DNLF102A2	NCB5-18GM40-N0-V1	CYLINDRICAL PROXIMITY SENSOR	P & F
11	DNLF112A2	NJ5-18GM-N-V1	CYLINDRICAL PROXIMITY SENSOR	P & F
12	DNLF122A2	NJ3-18GK-S1N	CYLINDRICAL PROXIMITY SENSOR	P & F
13	DNLF132A2	NJ2-11-N-G	CYLINDRICAL PROXIMITY SENSOR	P & F
14	DNLF142A2	NJ2-11-SN-G	CYLINDRICAL PROXIMITY SENSOR	P & F
15	DNLF152A2	NBN4-12GM50-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
16	DNLF162A2	NJ2-12GM40-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
17	DNLF172A2	NBB5-18GM60-WO	CYLINDRICAL PROXIMITY SENSOR	P & F
18	DNLF182A2	NJ5-18GK-SN	CYLINDRICAL PROXIMITY SENSOR	P & F
19	DNLF192A2	NCB5-18GM40-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
20	DNLF202A2	NBB5-18GM60-WS	CYLINDRICAL PROXIMITY SENSOR	P & F
21	DNLF212A2	NJ6-22-N-G	CYLINDRICAL PROXIMITY SENSOR	P & F
22	DNLF222A2	NBB5-18GM40-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
23	DNLF232A2	NJ8-18-GM-N	CYLINDRICAL PROXIMITY SENSOR	P & F
24	DNLF242A2	NCN4-12GM-40-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
25	DNLF252A2	NBB5-18GM50-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
26	DNLF262A2	NJ5-11-N-G	CYLINDRICAL PROXIMITY SENSOR	P & F
27	DNLF272A2	NJ2-12GK-SN	CYLINDRICAL PROXIMITY SENSOR	P & F
28	DNLF282A2	NBB5-18GM50-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
29	DNLF292A2	NJ4-12GK-N	CYLINDRICAL PROXIMITY SENSOR	P & F
30	DNLF302A2	NJ4-12GM50-WS	CYLINDRICAL PROXIMITY SENSOR	P & F
31	DNLF312A2	NJ2-12GM50-WS	CYLINDRICAL PROXIMITY SENSOR	P & F
32	DNLF322A2	NJ5-18GM50-E2-3G-3D	CYLINDRICAL PROXIMITY SENSOR	P & F
33	DNLF332A2	NCB4-12GM40-N0	CYLINDRICAL PROXIMITY SENSOR	P & F
34	DNLF342A2	NBB2-12GM40-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
35	DNLF352A2	NJ4-12GM40-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
36	DNLF362A2	NJ2-12GK-N	CYLINDRICAL PROXIMITY SENSOR	P & F
37	DNLF372A2	NJ1.5-8GM-N	CYLINDRICAL PROXIMITY SENSOR	P & F
38	DNLF382A2	NBB4-12GM-40-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
39	DNLF392A2	NJ4-12GK-SN	CYLINDRICAL PROXIMITY SENSOR	P & F



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TABLE 06-02 : SWITCH MODEL-2A				
SR NO	MODEL CODE	SWITCH MODEL	SENSOR TYPE	MAKE
40	DNLF402A2	NJ4-12GM-N	CYLINDRICAL PROXIMITY SENSOR	P & F
41	DNLF412A2	NCB2-12GM40-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
42	DNLF422A2	NBB8-18GM60-US	CYLINDRICAL PROXIMITY SENSOR	P & F
43	DNLF432A2	NBB4-12GM-50-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
44	DNLF442A2	NBN8-18GM40-Z0	CYLINDRICAL PROXIMITY SENSOR	P & F
45	DNLF452A2	NCN4-12GM-40-Z0-3G-3D	CYLINDRICAL PROXIMITY SENSOR	P & F
46	DNLF462A2	NJ1.5-8-N-Y18812	CYLINDRICAL PROXIMITY SENSOR	P & F
47	DNLF472A2	NCN8-12GM35-Z4	CYLINDRICAL PROXIMITY SENSOR	P & F
48	DNLF482A2	NBB5-18GM40-WS	CYLINDRICAL PROXIMITY SENSOR	P & F
49	DNLF492A2	NBB5-18GM40-Z0-3G-3D	CYLINDRICAL PROXIMITY SENSOR	P & F
50	DNLF502A2	NBN8-18GM60-WS	CYLINDRICAL PROXIMITY SENSOR	P & F
51	DNLF512A2	NBB2-12GM50-E2	CYLINDRICAL PROXIMITY SENSOR	P & F
52	DNLF522A2	NJ8-18GK-N	CYLINDRICAL PROXIMITY SENSOR	P & F
53	DNLF532A2	NJ1.5-8GM40-WS	CYLINDRICAL PROXIMITY SENSOR	P & F
54	DNLF542A2	NCB4-12GM35-Z4	CYLINDRICAL PROXIMITY SENSOR	P & F
55	DNLF552A2	NBB1.5-8GM40-Z1	CYLINDRICAL PROXIMITY SENSOR	P & F
56	DNLF562A2	NBB4-12GM50-A2	CYLINDRICAL PROXIMITY SENSOR	P & F
57	DNLF622A2	NBB2-V3-US	CYLINDRICAL PROXIMITY SENSOR	P & F

TABLE 06-03 : SWITCH MODEL-3A				
SR NO	MODEL CODE	SWITCH MODEL	SENSOR TYPE	MAKE
1	DNLF3A2	NJ-2-V3N	FLAT TYPE PROXIMITY SENSOR	P & F
2	DNLF13A2	NBB3-V3-Z4	FLAT TYPE PROXIMITY SENSOR	P & F
3	DNLF23A2	NBB4-F1-US	FLAT TYPE PROXIMITY SENSOR	P & F
4	DNLF33A2	NBB8-F33-E2	FLAT TYPE PROXIMITY SENSOR	P & F
5	DNLF43A2	NBN5-F7-E0	FLAT TYPE PROXIMITY SENSOR	P & F
6	DNLF53A2	NBN5-F7-E2	FLAT TYPE PROXIMITY SENSOR	P & F
7	DNLF63A2	NBB2-V3-E0-V5	FLAT TYPE PROXIMITY SENSOR	P & F
8	DNLF73A2	NBB2-V3-E2-V5	FLAT TYPE PROXIMITY SENSOR	P & F
9	DNLF83A2	NBB2-V3-US	FLAT TYPE PROXIMITY SENSOR	P & F
10	DNLF93A2	NBB8-F33-E2	FLAT TYPE PROXIMITY SENSOR	P & F
11	DNLF103A2	NBB2-V3-E2	FLAT TYPE PROXIMITY SENSOR	P & F
12	DNLF113A2	NBB2-F1-US	FLAT TYPE PROXIMITY SENSOR	P & F
13	DNLF123A2	NBN4-V3-E2-3G-3D	FLAT TYPE PROXIMITY SENSOR	P & F
14	DNLF133A2	NCB2-V3-N0	FLAT TYPE PROXIMITY SENSOR	P & F
15	DNLF143A2	NJ2-V3-N-Y89549	FLAT TYPE PROXIMITY SENSOR	P & F
16	DNLF153A2	NBB5-F9-E0-V3	FLAT TYPE PROXIMITY SENSOR	P & F
17	DNLF163A2	NBB3-V3-Z4-3G-3D	FLAT TYPE PROXIMITY SENSOR	P & F
18	DNLF173A2	NBB2-V3-E2	FLAT TYPE PROXIMITY SENSOR	P & F



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TABLE 06-04 : SWITCH MODEL-4A				
SR NO	MODEL CODE	SWITCH MODEL	SENSOR TYPE	MAKE
1	DNLF4A2	SJ-3.5-N	SLOT TYPE PROXIMITY SENSOR	P & F
2	DNLF14A2	SJ-3.5-E2	SLOT TYPE PROXIMITY SENSOR	P & F
3	DNLF24A2	SJ3.5-SN	SLOT TYPE PROXIMITY SENSOR	P & F
4	DNLF34A2	SJ3.5-S1N	SLOT TYPE PROXIMITY SENSOR	P & F
5	DNLF44A2	SB-3.5-E2	SLOT TYPE PROXIMITY SENSOR	P & F
6	DNLF54A2	SC3.5-N0-BU	SLOT TYPE PROXIMITY SENSOR	P & F
7	DNLF64A2	SJ3.5-SN-Y89604	SLOT TYPE PROXIMITY SENSOR	P & F
8	DNLF74A2	SC3.5-G-N0	SLOT TYPE PROXIMITY SENSOR	P & F

TABLE 06-05 : SWITCH MODEL-5A				
SR NO	MODEL CODE	SWITCH MODEL	SENSOR TYPE	MAKE
1	DNLF5A2	MICROSWITCH -V15S05-CZ100A05-01	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
2	DNLF15A2	MICROSWITCH -V7-1C17E9-201	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL
3	DNLF25A2	MICROSWITCH V15T10-EZ200A05	ROLLER LEVER TYPE MICROSWITCH	HONEYWELL

TABLE 06-06 : SWITCH MODEL-6A				
SR NO	MODEL CODE	SWITCH MODEL	SENSOR TYPE	MAKE
1	DNLF6A2	REED SWITCH (RHODIUM CONTACT)	REED SWITCH	COBRA
2	DNLF16A2	COBRA GOLD SWITCH (GOLD CONTACT)	REED SWITCH	COBRA
3	DNLF26A2	COBRA GOLD SWITCH(TUNGUNGESTEN CONTACT 2A-24V DC)	REED SWITCH	COBRA
4	DNLF36A2	COBRA SWITCH (TUNESTEN CONTACT 3A-24V DC)	REED SWITCH	COBRA
5	DNLF56A2	DPDT COBRA	REED SWITCH	COBRA
6	DNLF156A2	DPDT COBRA GOLD	REED SWITCH	COBRA

END OF DOCUMENT