



(1) **EU-TYPE EXAMINATION CERTIFICATE**

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **ICQC 24 ATEX 0525 X** **Issue: 0**

(4) Equipment: **Limit Switch / Position Transmitter (Transducer) DNLF Series**

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

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

(7) This equipment and any acceptable variations, also documents which are specified in the schedule to this certificate.

(8) The Certification Body ICQC, Notified Body No. 2549 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential report No. **525/2024/04/ATEX**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018+AC:2020-02, EN 60079-1:2014+AC:2018-09, EN IEC 60079-31:2024

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture and supply of this equipment. These are not covered by the certificate

(12) The marking of the equipment or protective system shall include the following:

	II 2 G Ex db IIB T6 Gb	II 2 G Ex db IIB T5 Gb
	II 2 D Ex tb IIIC T85°C Db	or II 2 D Ex tb IIIC T100°C Db
	-20 °C ≤ Ta ≤ +60 °C	-20 °C ≤ Ta ≤ +70 °C

Head of Certification Body:



Sergey Kovalev

Date of issue: 05 August 2024
Jurmala, Latvia

(13) SCHEDULE

(14) to EU-TYPE EXAMINATION CERTIFICATE: ICQC 24 ATEX 0525 X

Issue: 0

(15) Description of Equipment:

Limit Switch / Position Transmitter (Transducer) DNLF Series mounts to an actuator and send the data about the position (end position) of the actuator.

The Limit Switch/ Position Transmitter (Transducer) comprises a rectangular enclosure manufactured from aluminium alloy grade LM6 or stainless steel grade SS316(CF8M) 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.

Type Designation:

DNLF	01	02	03	04	05	06	07	08	09	10	11
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01: MODEL			07: INDICATOR	
CODE	TYPE	MODEL CODE	*	WITHOUT INDICATOR
DNLF 1A- DNLF 1A	LIMIT SWITCH	Ref. MANUAL	Y	RED AND YELLOW
DNLF PTR01	POSITION TRANSMITTER	POSITION TRANSMITTER	G	RED AND GREEN
DNLF PTR02		SMART TRANSMITTER	3L	3 WAY L PORT
			3T	3 WAY T PORT
			08: TEMPERATURE RANGE	
			*	-20 °C TO +60 °C
			*	-20 °C TO +70 °C
02: No OF SWITCHES			09: CABLE ENTRY	
1	ON-OFF		*	DUAL
2	MODULATION		4 Q	4 ENTRY
3			10: BRACKET	
4			REFER CATALOGUE ANNEXURE B	
*	[1] COUNTER CLOCKWISE		11 CERTIFICATES	
CW	[1] COUNTER CLOCKWISE		*	BIS
03: PTR			C	CMRI
*	WITHOUT PTR		A	ATEX/IECEX
PT	[2] WITH PTR		U	UL
04: CABLE ENTRY SIZE			CC	CCOE
4R	1/2" NPT (F)		I	INMETRO
6R	3/4" NPT (F)		G	GOST
3M	M20x1.5 (F)		D	DGMS
05: BODY AND COVER MATERIAL			NOTE: [1] APPLICABLE FOR MODEL OPTION DNLF PTR01 AND DNLF PTR02 [2] APPLICABLE FOR LIMIT SWITCH MODEL WITH PTR	
*	ALUMINIUM			
B5	CF8M			
06: COLOUR				
*	BLACK			
B	BLUE			
Y	YELLOW			

Technical characteristics:

Parameters	Value
Switching voltage	up to 250 V AC/DC
Switching current	up to 10 A
Ambient Temperature Range	-20 °C ≤ Ta ≤ +60 °C -20 °C ≤ Ta ≤ +70 °C
Degree of protection	IP 66/67

Warning markings:

"WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT"

"WARNING-POTENTIAL ELECTROSTATIC CHARGING HAZARD- SEE INSTRUCTION"

"WARNING-SELECTION OF CABLE AND CABLE GLAND, SEE INSTRUCTION"

Routine tests:

Manufacturer shall carry out the routine pressure test on each and every unit at pressure of 8.6 bar for 10 second as required by clause 16 EN 60079-1. No damage, deformation or leakage through cemented joint and wall of the enclosure shall occur.

(16) Descriptive Documents:

INSTALLATION OPERATION AND MAINTENANCE MANUAL 1-11-01-D-07760

The drawings are listed in Evaluation report No: 525/2024/04/ATEX

Certificate History:

Issue/Date	Evaluation report	Comment
Issue 0 from 05.08.2024	525/2024/04/ATEX	The release of the prime certificate.

(17) Specific conditions of use:

17.1 The manufacturer has maintained more stringent gaps, larger flamepath length and more number of threads engaged than those specified in the standard IEC 60079-1. The user must refer to manufacturer before carrying out any repairs or refurbishment to the equipment.

17.2 The fastening screws shall be of stainless steel socket head cap screws of property class A2-70 with minimum yield stress of 450 MPa.

17.3 The enclosure may present a potential electrostatic charging hazard. See the Manufacturer's instructions for further information. The manual contains instructions as "The polycarbonate indicator must only be cleaned with a damp cloth in order to avoid ignition hazard caused by static electricity" and the equipment must not be located in a direct or dust laden air-stream.

17.4 Dust layers shall be prevented from building up on the outside surface of the enclosure, and the enclosure shall be routinely cleaned.

(18) Essential Health and Safety Requirements:

Met by compliance with the standards mentioned in clause (9).