



OPERATORS

for potentially explosive atmospheres
flameproof enclosure
II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIC Db IP66/IP67
aluminium or stainless steel enclosure



Series
NF
WSNF

FEATURES

- Explosionproof operator for use in potentially explosive atmospheres according to ATEX-Directive 2014/34/EU
EC type examination certificate no.: **LCIE 00 ATEX 6008 X**
IECEX Certificate of Conformity no.: **IECEX LCI 07.0015X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards EN-IEC 60079-0, EN-IEC 60079-1 and EN-IEC 60079-31
- Easy electrical installation by means of a screw terminal coil
- Enclosure provided with a 1/2 NPT threaded entry hole (M20 x 1,5 in option) for a broad range of cable entries
- Ingress protection degree IP66/67
- A wide range of valves can be supplied with the operator

CONSTRUCTION

Solenoid enclosure

NF Chromated aluminium, epoxy coated

WSNF Stainless steel (AISI 316L)

Bonnet

NF Steel (zinc plated)

WSNF Stainless steel (nickel plated)

Core, core tube and plugnut

all Stainless steel

Shading coil

all Copper or silver

Nameplate

NF Stainless steel

WSNF Stainless steel

Coil connection

all Embedded screw terminals

Fasteners & screws

all Stainless steel

Safety code

IECEX / II 2G Ex d IIC T6..T4 Gb
IECEX / II 2D Ex tb IIC 85°C..135°C Db IP66/67

ELECTRICAL CHARACTERISTICS

Standard voltages

(Other voltages and 60 Hz on request)

DC (=) : 24V - 48V

AC (~) : 24V - 48V - 115V - 230V⁽³⁾ / 50 Hz

TEMPERATURE CLASSIFICATION TABLES

AC (~) solenoids

Pn (watt)	solenoid size			maximum ambient °C ⁽¹⁾			
	MXX	M12		surface temperature			
				T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F/H (155°C/180°C) 100% E.D.							
1,85 ⁽²⁾⁽³⁾	●			75	80		
3,7 ⁽²⁾	●			60	75	100	
5,8 ⁽²⁾	●			60	75	100	
10,0 ⁽²⁾	●			40	60	75	
10,0 ⁽²⁾	●			40	60	100	
10,5	●			25	40	60	
13,4 ⁽²⁾	●			40	60	75	
14,1 ⁽²⁾	●			40	60	90	
15,4	●			25	40	60	
16,5	●			40	60	75	
16,7	●				25	40	
20,0	●				25	40	
20,5	●					25	
28,0	●					25	

DC (=) solenoids

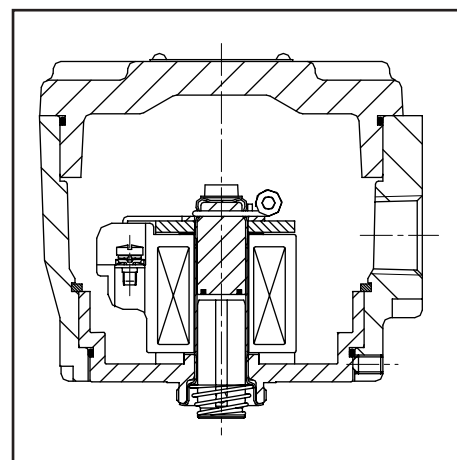
Pn (watt)	solenoid size			maximum ambient °C ⁽¹⁾			
	MXX	M12		surface temperature			
				T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F/H (155°C/180°C) 100% E.D.							
1,8		●		75	80		
3,6		●		60	75	100	
5,7		●		60	75	100	
10,0		●		40	60	100	
11,2	●			40	60	75	
14,0		●		40	60	90	
16,8		●		40	60	75	
19,7	●			25	40	60	
23,0		●		25	40	60	
26,6		●		25	40	60	
29,5		●			25	40	
36,2		●			25	40	

Check the wattage compatibility with the product selected.

⁽¹⁾ The minimum allowable ambient temperature is -60°C for the operator. Actual temperature range can be limited depending on valve operation limits.

⁽²⁾ AC (~): rectified coil construction.

⁽³⁾ 230 V AC does not exist (Pn 1,85 W).



ORDERING INFORMATION

A valve supplied with the explosionproof operator will be identified with prefix NF or WSNF before the catalogue number.

Example: **NF E 210D095 230V/50 Hz**

operator — voltage
pipe thread — basic number
ISO 7/1

A valve supplied with the explosionproof operator will be identified with electrical interface FN, FS, FT or FU in the 15-digit product code.

15-DIGIT PRODUCT CODE

E 262 K 232 FN V00 H1

Thread connection — Voltage-class
Product series — Options
Revision letter —
Valves version —
Electrical interface
FN = NF
FS = WSNF
FT = NFET
FU = WSNFET



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OPTIONS

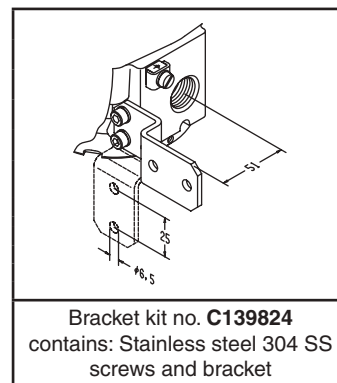
- Operators for mining, I M2 Ex d I, contact us

ORDERING EXAMPLES:

NF	B	327	B	001	230V / 50 Hz
NF	G	551	B	405	230V / 50 Hz
NFET	G	327	B	001 V	230V / 50 Hz
WSNF	E	272	A	047 MS	24V / DC
WSNF	B	320	A	184 E	24V / DC

prefix ———
 pipe thread ———
 basic number ———
 voltage ———
 suffix ———

MOUNTING BRACKET



15-DIGIT PRODUCT CODE						
E	262	K	232	FN	V00	H1
E	262	K	232	FS	V00	F8
E	262	K	232	FT	V00	FT
E	262	K	232	FU	V00	H9

Thread connection ———
 Product series ———
 Revision letter ———
 Valves version ———
 Electrical interface ———
 Voltage - class ———
 Options ———

CONNECTIONS

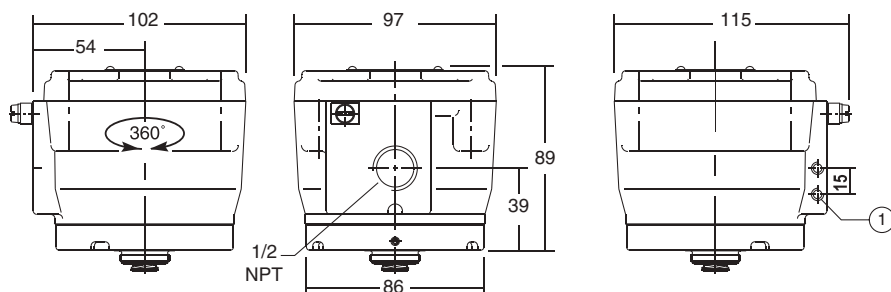
- Any ATEX approved cable entry device can be fitted in the 1/2 NPT threaded entry hole (M20 x 1.5 in option). Refer to the nameplate for identification of the maximum cable temperature
- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable position for cable entry

DIMENSIONS (mm), WEIGHT (kg)



TYPE NF-WSNF

Prefix "NF" , "WSNF" Solenoid / Electrical interface FN/FS/FT/FU
Aluminium, stainless steel
(NF, epoxy coated)
EN-IEC 60079-1 and EN-IEC 60079-31
II 2G Ex d IIC Gb, II 2D Ex tb IIIC Db IP66/67



series	weight
NF	1,4
WSNF	2,7

- ① 2 mounting holes M5, depth 9 mm



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