



# 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 ATEX 94/9/EC  
 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<sup>(3)</sup> / 50 Hz

## TEMPERATURE CLASSIFICATION TABLES

### AC (~) solenoids

Pn (watt)	solenoid size		maximum ambient °C <sup>(1)</sup>			
	MX	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 <sup>(2)(3)</sup>	●		75	80		
3,7 <sup>(2)</sup>	●		60	75	100	
5,8 <sup>(2)</sup>	●		60	75	100	
10,0 <sup>(2)</sup>	●		40	60	75	
10,0 <sup>(2)</sup>	●		40	60	100	
10,5	●		25	40	60	
13,4 <sup>(2)</sup>	●		40	60	75	
14,1 <sup>(2)</sup>	●		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

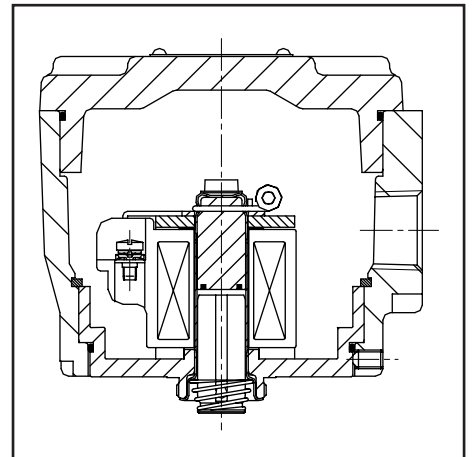
Pn (watt)	solenoid size		maximum ambient °C <sup>(1)</sup>			
	MX	M12	surface temperature			
			T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F/H (155°C/180°C) 100% E.D.						
1,8	●		75	80		
3,6	●		60	75	100	
5,7	●		60	75	100	
10,0	●		40	60	100	
11,2	●		40	60	75	
14,0	●		40	60	90	
16,8	●		40	60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

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

<sup>(2)</sup> AC (-): rectified coil construction.

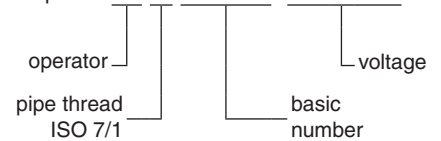
<sup>(3)</sup> 230 V AC does not exist (Pn 1,85 W).



## 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**



### OPTIONS

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

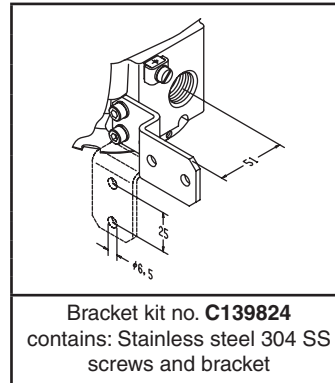
### ORDERING EXAMPLES:

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	_____	_____	_____	voltage
pipe thread	_____	_____	_____	suffix
basic number	_____	_____	_____	

### MOUNTING BRACKET



### CONNECTIONS

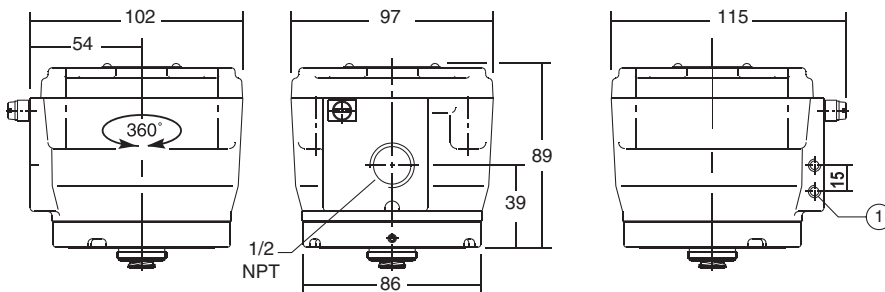
- Any ATEX approved cable entry device can be fitted in the 1/2 NPT threaded entry hole (M20 x 1.5 in option). Refer to the nameplate for identification of the maximum cable temperature
- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable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

### DIMENSIONS (mm), WEIGHT (kg)



#### TYPE NF-WSNF

Prefix "NF", "WSNF" Solenoid  
 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



prefix	weight
NF	1,4
WSNF	2,7

① 2 mounting holes M5, depth 9 mm