



for potentially explosive atmospheres
 flameproof enclosure
 II 2G Ex d IIC Gb T6..T4, II 2D Ex t IIIC Db 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 IP67
- 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 Gb T6..T4 IECEx / II 2D Ex t IIIC Db IP67 T85°C..T135°C

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⁾			
	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 ⁽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	
insulation class F (155°C) 100% E.D.						
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	
insulation class H (180°C) 100% E.D.						
10,5	●		25	40	75	
15,4	●		25	40	75	
16,7	●			25	60	
20,0	●			25	60	
20,5	●				25	
28,0	●				25	

DC (=) solenoids

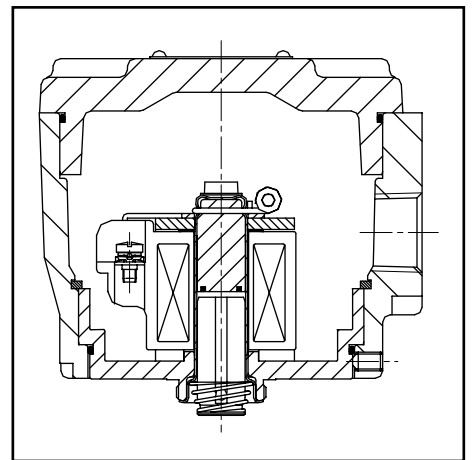
Pn (watt)	solenoid size		maximum ambient °C ⁽¹⁾			
	MX	M12	surface temperature			
			T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F/H (155°C/180°C) 100% E.D.						
1,8	●		75	80		
3,6	●		60	75	100	
5,7	●		60	75	100	
10,0	●		40	60	100	
insulation class F (155°C) 100% E.D.						
11,2	●		40	60	75	
14,0	●		40	60	90	
16,8	●		40	60	75	
19,7	●		25	40	60	
23,0	●		25	40	60	
insulation class H (180°C) 100% E.D.						
11,2	●		40	60	100	
16,8	●		40	60	100	
17,4	●		25	40	60	
19,7	●		40	60	75	
23,0	●		25	40	75	
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.

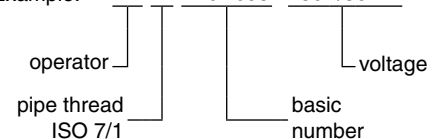
⁽³⁾ 230 V AC does not exist (Pn 1,85 W).



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**



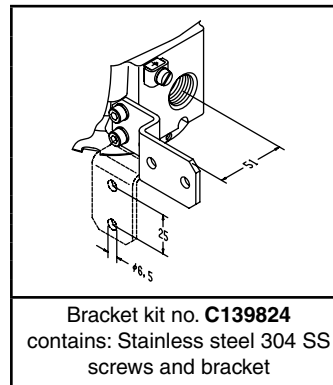
OPTIONS

- 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	_____	_____	_____	_____	_____	
basic number	_____	_____	_____	_____	_____	suffix

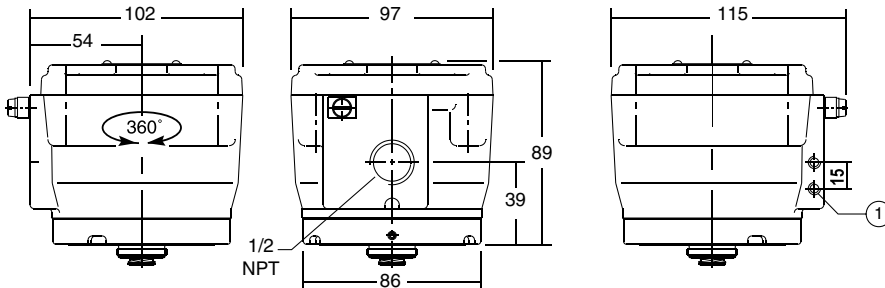
MOUNTING BRACKET

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 t IIIC Db IP67



prefix	weight
NF	1,4
WSNF	2,7

- ① 2 mounting holes M5, depth 9 mm