

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

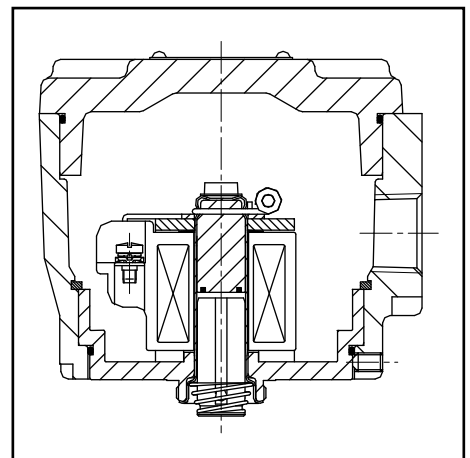
Pn (watt)	solenoid size		maximum ambient °C ⁽¹⁾			
	MX	M12	surface temperature			
			T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F/H (155°C/180°C) 100% E.D.						
1,8	●		75	80		
3,6	●		60	75	100	
5,7	●		60	75	100	
10,0	●		40	60	100	
insulation class F (155°C) 100% E.D.						
11,2	●		40	60	75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

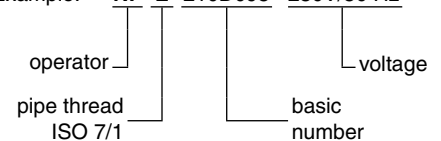
⁽³⁾ 230 V AC does not exist (Pn 1,85 W).



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**

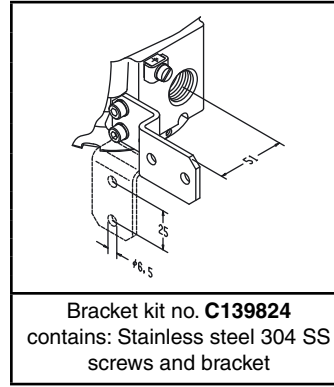


ORDERING EXAMPLES:

	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



CONNECTIONS

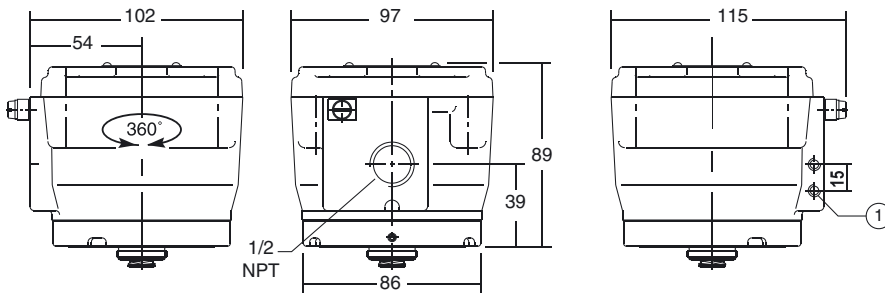
- Any ATEX approved cable entry device can be fitted in the 1/2 NPT threaded entry hole (M20 x 1.5 in option). Refer to the nameplate for identification of the maximum cable temperature
- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable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

FEATURES

- Explosionproof operator for use in potentially explosive atmospheres according to ATEX-Directive 94/9/EC
 EC type examination certificate no.: **LCIE 01 ATEX 6050 X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with European Standards EN 60079-0, EN 60079-1, EN 61241-0 and EN 61241-1
- Easy electrical installation by means of a screw terminal coil
- Enclosure provided with a 3/4 NPT threaded entry hole (1/2 NPT or M20 x 1,5 in option) for a broad range of cable entries
- Ingress protection degree IP65
- A wide range of valves can be supplied with the operator

CONSTRUCTION

Solenoid enclosure
Bonnet, cover screws
Core, core tube and plugnut
Shading coil
Nameplate
Coil connection
Safety code

Aluminium, cataphoresis black painting
 Steel (stainless steel for stainless steel valves)
 Stainless steel
 Copper or silver
 Aluminium
 Embedded screw terminals
 ⓧ II 2 G Ex d IIB + H2 T6..T4
 ⓧ II 2 D Ex tD A21 IP65 T85°C..T135°C



ELECTRICAL CHARACTERISTICS

Standard voltages
 (Other voltages and 60 Hz on request)

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

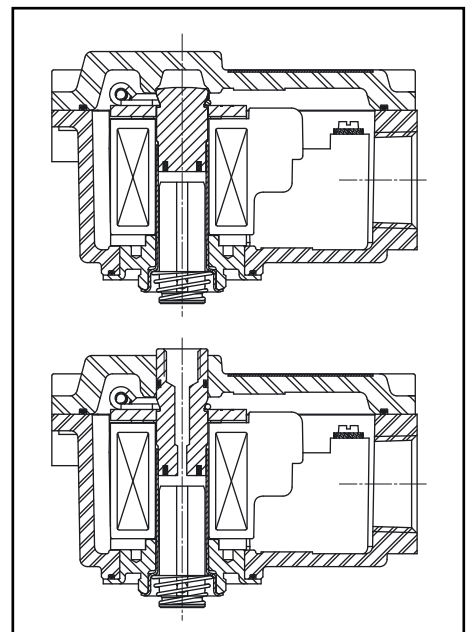
TEMPERATURE CLASSIFICATION TABLES

AC (~) solenoids

Pn (watt)	solenoid size				maximum ambient °C ⁽¹⁾			
	MX	XX	XX	XX	surface temperature			
					T6	T5	T4	T3
					85°C	100°C	135°C	200°C
insulation class F (155°C) 100% E.D.								
10,0 ⁽²⁾	●				25	40	60	
10,5	●					25	50	
insulation class H (180°C) 100% E.D.								
10,5	●					25	60	

DC (=) solenoids

Pn (watt)	solenoid size				maximum ambient °C ⁽¹⁾			
	MX	XX	XX	XX	surface temperature			
					T6	T5	T4	T3
					85°C	100°C	135°C	200°C
insulation class F (155°C) 100% E.D.								
11,2	●				25	40	60	
19,7	●						60	
insulation class H (180°C) 100% E.D.								
11,2	●				25	40	75	
17,4	●					25	60	
19,7	●						60	



Check the wattage compatibility with the product selected.

⁽¹⁾ The minimum allowable ambient temperature is -40°C for the operator. Actual temperature range can be limited depending on valve operation limits.

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

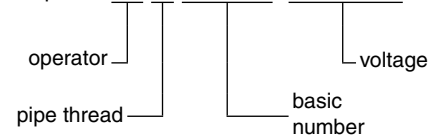
CONNECTIONS


- Any ATEX approved cable entry device can be fitted in the 3/4" NPT threaded entry hole (1/2" NPT, M20 x 1.5 in option)
- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable position for cable entry

ORDERING INFORMATION

A valve supplied with the explosionproof operator will be identified with prefix NK before the catalogue number.

Example: **NK E 272A018 230V/50 Hz**

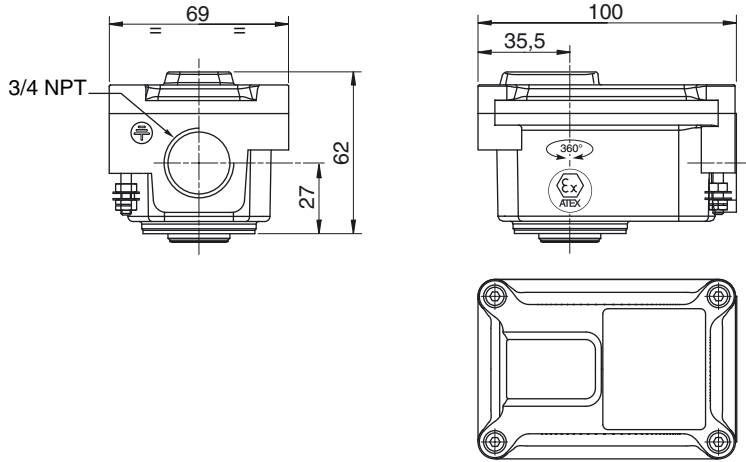


DIMENSIONS (mm), WEIGHT (kg) 



TYPE NK

Prefix "NK" Solenoid
Aluminium, epoxy coated
EN 60079-1 and EN 61241-1
II 2 G Ex d IIB + H2 - II 2D Ex tD A21 IP65



TYPE NK

Prefix "NK" Solenoid
Aluminium, epoxy coated
EN 60079-1 and EN 61241-1
II 2 G Ex d IIB + H2 - II 2D Ex tD A21 IP65

