



# OPERATORS

for potentially explosive atmospheres  
 flameproof, II 2G Ex d IIB + H<sub>2</sub> T6..T4  
 II 2D Ex tD A21 IP65  
 aluminium enclosure

Series

**NK**

## FEATURES

- Explosion proof operator, intended for use in potentially explosive atmospheres, according to Directive ATEX 94/9/EC
- EC type examination certificate (LCIE 01 ATEX 6050 X) is in compliance with the European Standards EN-IEC 60079-0, EN-IEC 60079-1 and EN-IEC 61241-0 and EN-IEC 61241-1
- Easy electrical installation by means of a screw terminal coil
- Enclosure provided with a 3/4" NPT threaded entry hole for a broad range of cable glands
- Ingress protection degree IP65
- A wide range of valves can be supplied with the operator

## CONSTRUCTION

<b>Solenoid enclosure</b>	Aluminium, cataphoresis black painting
<b>Bonnet</b>	Steel (zinc plated)
<b>Cover screws</b>	Steel (stainless steel for st. steel valves)
<b>Core, tube, springs &amp; plugnut</b>	Stainless steel
<b>Shading coil</b>	Copper or silver
<b>Nameplate</b>	Aluminium
<b>Coil connection</b>	Embedded screw terminals
<b>Fasteners &amp; screws</b>	Stainless steel

## ELECTRICAL CHARACTERISTICS SAFETY CODE

<b>Standard voltages:</b>	II 2G Ex d IIB + H <sub>2</sub> T6..T4 (gas)
DC (=): 24V - 48V	II 2D Ex tD IP65 85°C to 135°C (dust)
AC (~): 24V - 48V - 115V - 230V / 50 Hz	
(Other voltages and 60 Hz on request)	

## TEMPERATURE CLASSIFICATION TABLES

The minimum allowable ambient temperature is -40°C for the operator. Select the requested "T" classification from the temperature classification tables (AC or DC), respecting the maximum ambient temperature and cold (20°C) electrical holding power values.

AC (~) Solenoids

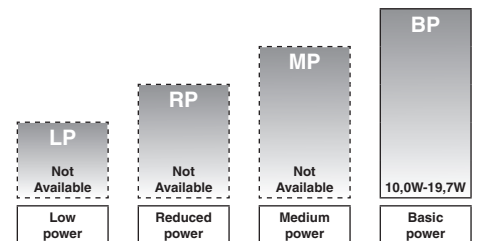
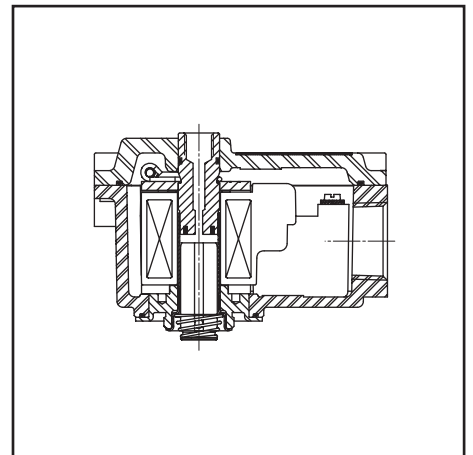
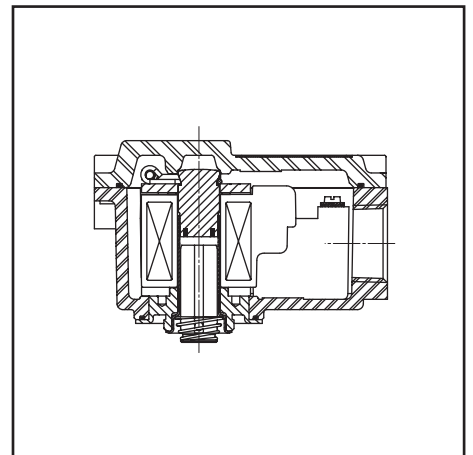
power level (watt)	insulation class	maximum ambient <sup>(1)</sup> temp. "T" classification		
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)
<b>Basic power (BP)</b>				
10,0 <sup>(2)</sup>	F	25°C	40°C	60°C
10,5	F	-	25°C	50°C
10,5	H	-	25°C	60°C

DC (=) Solenoids

power level (watt)	insulation class	maximum ambient <sup>(1)</sup> temp. "T" classification		
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)
<b>Basic power (BP)</b>				
11,2	F	25°C	40°C	60°C
11,2	H	25°C	40°C	75°C
17,4	H	-	25°C	60°C
19,7	F	-	-	60°C
19,7	H	-	-	60°C

<sup>(1)</sup> Make sure that the selected ambient temperature does not exceed the allowable valve temperature characteristics as specified on the appropriate valve catalogue sheets.

<sup>(2)</sup> AC (~) rectified coil construction



POWER LEVELS - cold electrical holding values (watt)

80220GB-2011/R01

All leaflets are available on: [www.asconumatics.eu](http://www.asconumatics.eu)



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## PREFIX TABLE

prefix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
N	K	E	T				Threaded conduit/hole (M20 x 1,5)	-	-	-	●
		T					Flameproof - Aluminium (EN/IEC 60079-1, 61241-1)*	-	-	-	●
				H	T		Threaded conduit (1/2" NPT)	-	-	-	●
						X	Class H - High temperature	-	-	-	●
							Other special constructions	-	-	-	●

● Available feature

\* ATEX solenoids are also approved according to EN 13463-1 (non electrical valves)

## PRODUCT SELECTION GUIDE

(The selection can only be made in conjunction with the appropriate valve catalogue sheet)

### STEP 1

Select basic valve catalogue number, including pipe thread identification letter from one of the specification tables on the separate catalogue pages.

**Example: G552A417**

### STEP 2

Select voltage. Refer to standard voltages on page 1.

**Example: 230V / 50Hz**

### STEP 3

Select solenoid prefix (combination). Refer to the prefix table on this page and respect the indicated power level, cold electrical holding values and "T" classification mentioned on page 1.

NOTE: Make sure that the ambient temperature does not exceed the allowable valve temperature characteristics.

**Example: NK**

**60°C ambient**

**Basic Power (BP) 10,5 W**

**II 2G Ex d IIB T4**

**II 2D tD A21 IP65**

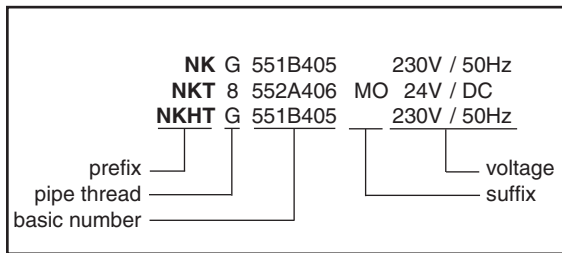
### STEP 4

Final catalogue / ordering number.

**Example:**

**NK G552A417 230V / 50 Hz**

## ORDERING EXAMPLES VALVES:



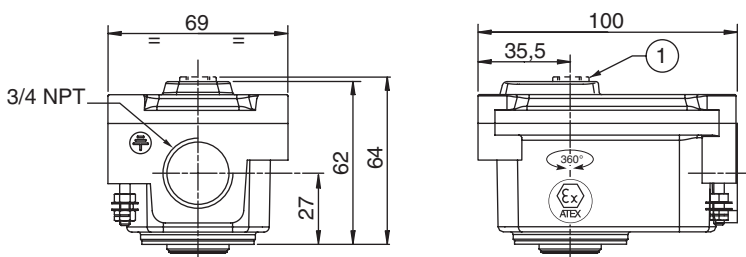
## ADDITIONAL OPTIONS

- Cable glands, refer to section 14

## INSTALLATION

- Multi language installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- Any Ex d IIB approved cable entry device can be fitted in the 3/4" NPT (optionally, 1/2" NPT or M20 x 1,5) threaded entry hole, refer to the nameplate for identification of the maximum cable temperature
- Internal and external earthing connection
- The operator can be rotated by 360° to select the most favourable position for cable entry

## DIMENSIONS (mm), WEIGHT (kg)



prefix	weight
NK	0,665 kg

- ① Available for 3/2 version (orifice 3 - G1/8)

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