

### FEATURES

- Operators intended for use in potentially explosive atmospheres according to ATEX-Directive 94/9/EC  
EC type examination certificate no.: **Baseefa 03 ATEX 0649 X**
- Compliance with the Essential Health and Safety Requirements has been assured by European Standards **EN 50014**, **EN 50021** and **EN 50281-1-1**
- The assembly consisting of the coil and connector has IP65 protection
- Easy electrical installation by means of spade plug connector
- The operator is available as both a push or pull type solenoid and can be supplied on a wide range of valves

### CONSTRUCTION

**Solenoid enclosure**  
**Core, tube, springs & plugnut**  
**Shading coil**  
**Connector**  
**Connector specification**  
**Electrical enclosure protection**  
**Safety code**

Epoxy encapsulated  
Stainless steel  
Copper or silver  
Spade plug (Ø 6-10 mm)  
ISO 4400 / EN 175301-803, form A  
IP65 (EN 60529)  
 II 3 G EEx nA II T4 / T3  
 II 3 D IP65 T 135°C to T 200°C



CE

### 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

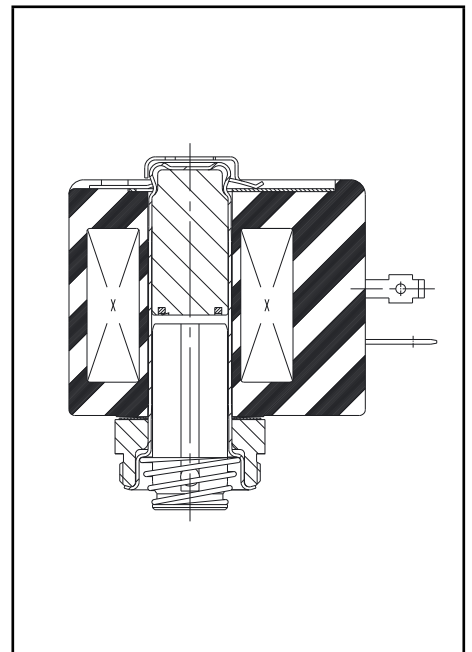
Pn (watt)	solenoid size			maximum ambient °C <sup>(1)</sup>			
	NM6	NMXX	NM12	surface temperature			
				T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.							
6,0	•						50
9,0	•						50
10,5		•					50
15,4			•				50
16,7		•					50
20,0			•				50

Check the wattage compatibility with the product selected.

<sup>(1)</sup> The minimum allowable ambient temperature is -20°C for the operator. Actual temperature range can be limited depending on valve operation limits.

#### DC (=) Solenoids

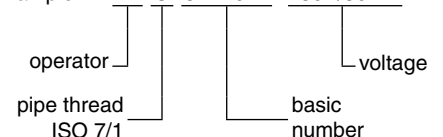
Pn (watt)	solenoid size			maximum ambient °C <sup>(1)</sup>			
	NM6	NMXX	NM12	surface temperature			
				T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.							
1,7		•					50
1,8			•				50
3,6			•				50
5,7			•				50
9,7	•					50	
10,0			•				50
11,0		•					50
14,0			•				50
15,3	•						50
11,2		•					50
16,8			•				50
19,7		•					50
23,0			•				50



### ORDERING INFORMATION

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

Example: **ZN** G 327A011 230V/50 Hz



### INSTALLATION

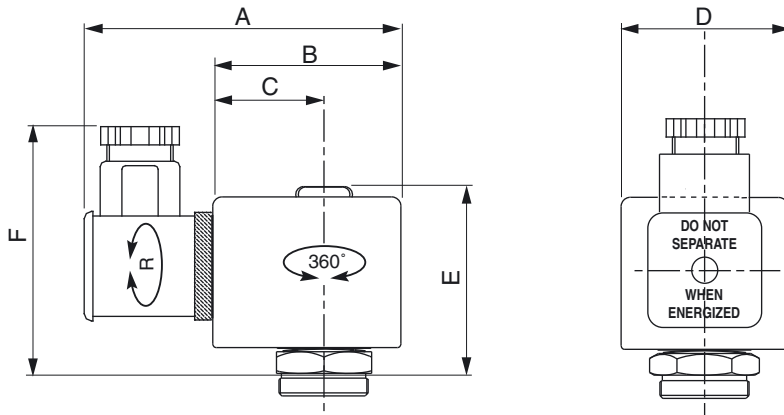
- The package consists of the solenoid valve, the coil (installed) and the connector (not installed)
- The coil is provided with an earthing connection
- The operator can be rotated through 360° to select the most favourable position for cable entry
- Easy connection with spade plug connector
- Installation/maintenance instructions are included with each coil

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



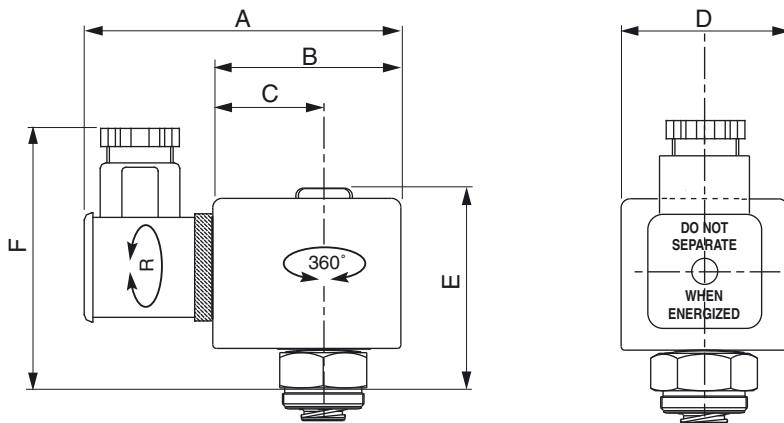
**TYPE ZN**  
 "ZN" Solenoid  
 EN 50021 and EN 50281-1-1  
 IP65 / II 3 G/D EEx nA II

#### Pull type solenoid operators



type	A	B	C	D	E	F	R	weight <sup>(1)</sup>
M6	80	45	28	39	45	63	4 x 90°	0,2
MXX	85	50	30	45	53	66	4 x 90°	0,3
M12	91	56	33	50	59	58	4 x 90°	0,4

#### Push type solenoid operators



type	A	B	C	D	E	F	R	weight <sup>(1)</sup>
MXX	85	50	30	45	60	74	4 x 90°	0,35

<sup>(1)</sup> including coil and connector.



# OPERATORS

for potentially explosive atmospheres  
non-sparking protection, II 3 G/D EEx nA II T6 to T3 IP67  
steel or stainless steel enclosure



Series  
**WPZN**  
**WSZN**

## FEATURES

- Operators intended for use in potentially explosive atmospheres according to ATEX-Directive 94/9/EC
- Compliance with the Essential Health and Safety Requirements has been assured by European Standards **EN IEC 60079-0**, **EN IEC 60079-15** and **EN 50281-1-1**
- Easy electrical installation by means of a screw terminal coil
- The solenoid enclosure has a cable gland with integral strain relief for cables with a diameter from 7 to 12 mm
- Ingress protection degree IP67
- The operator is available as both a push or pull type solenoid and can be supplied on a wide range of valves with ASCO interface

## CONSTRUCTION

<b>Solenoid enclosure</b>	WPZN	Zinc plated steel (epoxy coated)
	WSZN	Stainless steel, AISI 316
<b>Cable gland</b>	All	PA
<b>Core, core tube &amp; plugnut</b>	All	Stainless steel
<b>Shading coil</b>	All	Copper or silver
<b>Electrical enclosure protection</b>	All	IP67 (EN 60529)
<b>Safety code</b>	All	II 3 G EEx nA II T6 to T3 II3 D IP67 T 85°C to T 200°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 <sup>(1)</sup> surface temperature			
	M6	MX	M12	T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.							
1,2 <sup>(2)</sup>			•	60			
1,5 <sup>(2)</sup>		•		60			
1,85 <sup>(2)</sup>			•	60	75	90	
3,7 <sup>(2)</sup>			•	60	75	90	
5,8 <sup>(2)</sup>			•	40	60	90	
6,0	•					40	75
9,0	•						50
10,0 <sup>(2)</sup>		•				70	
10,0 <sup>(2)</sup>			•			75	
10,5			•				50
13,4 <sup>(2)</sup>			•			40	60
14,1 <sup>(2)</sup>			•			50	90
15,4			•				40
16,5 <sup>(2)</sup>			•			40	75
16,7			•				40
insulation class H (180°C) 100% E.D.							
6,0	•					40	75
9,0	•						75
10,5		•					75
15,4			•				50
16,7			•				40
insulation class F (155°C) 10% E.D.							
6,0	•			40	60	75	
10,5		•		40	60	75	
16,7			•	40	60	75	

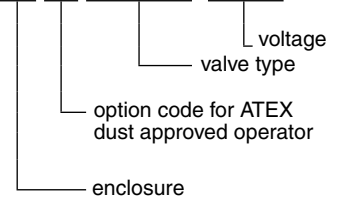
### DC (=) Solenoids

Pn (watt)	solenoid size			maximum ambient °C <sup>(1)</sup> surface temperature			
	M6	MX	M12	T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.							
1,3			•	60			
1,7		•		60			
1,8			•	60	75	90	
3,6			•	60	75	90	
5,7			•	40	60	90	
9,7	•					70	
10,0			•			75	
11,0		•				60	75
11,2			•			60	75
14,0			•			50	90
15,3	•						50
16,8			•			40	75
19,7		•					25
23,0			•				50
insulation class H (180°C) 100% E.D.							
9,7	•					70	75
11,2		•				50	75
13,3	•					40	60
15,3	•						75
16,8			•			40	75
17,4		•					60
19,7			•				50
23,0			•				75
26,6			•				60
insulation class F (155°C) 10% E.D.							
11,2			•	60	75		
19,7			•	40	60	75	
20,8	•			40	60	75	
30,0			•	40	60	75	

## ORDERING INFORMATION

A valve supplied with the explosionproof operator will be identified with prefix **WPZN** or **WSZN** before the catalogue number.

Example: **WP ZN G327A001 24V/DC**



Check the wattage compatibility with the product selected.

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

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

### INSTALLATION

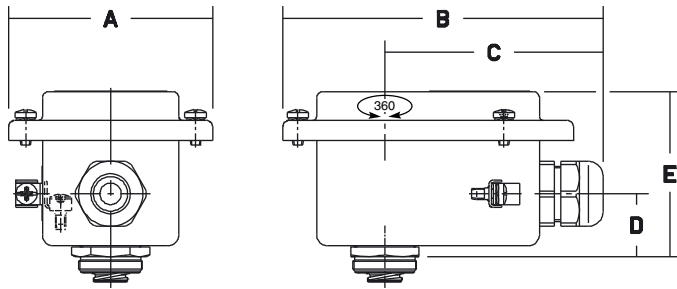
- The package consists of the solenoid valve and operator (installed)
- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable position for cable entry
- Installation/maintenance instructions are included with each coil

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

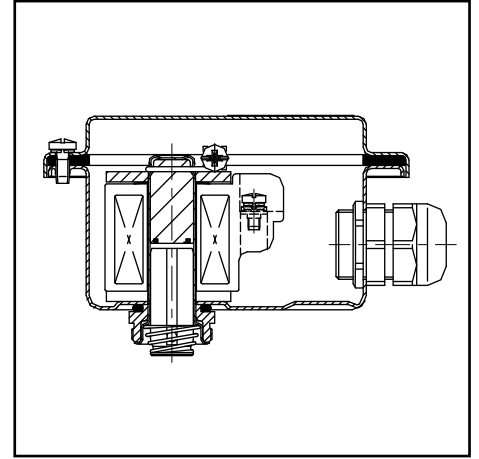


**TYPE WPZN/WSZN**  
 "WPZN", "WSZN" Solenoid  
 Steel or stainless steel  
 EN IEC 60079-15 and EN 50281-1-1  
 IP67 / II 3 G/D EEx nA II

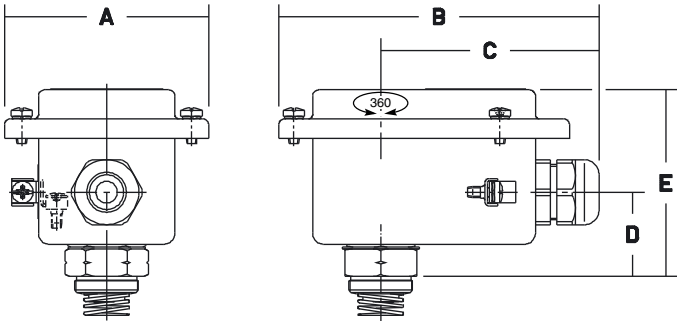
#### Pull type solenoid operator



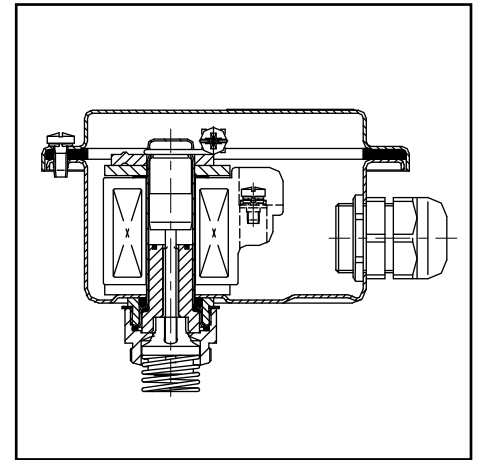
type	A	B	C	D	E	weight
WPZN/WSZN-M6	77	120	82	26	64	0,48
WPZN/WSZN-MXX	77	120	82	23	62	0,55
WPZN/WSZN-M12	77	120	82	21	65	0,67



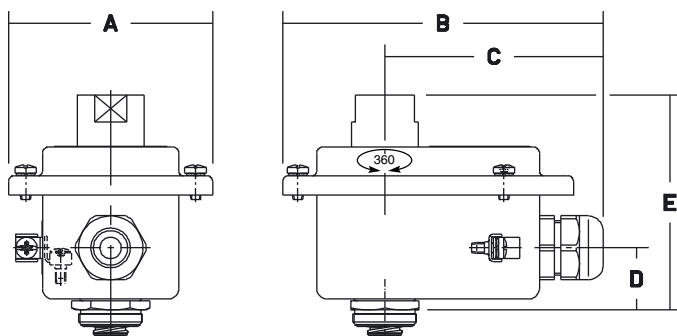
#### Push type solenoid operator



type	A	B	C	D	E	weight
WPZN/WSZN-M6	77	120	82	25	63	0,50
WPZN/WSZN-MXX	77	120	82	31	69	0,59
WPZN/WSZN-M12	77	120	82	30	73	0,70



#### Pull type solenoid operator



type	A	B	C	D	E	weight
WPZN/WSZN-MXX	77	120	82	23	80	0,68

