



# OPERATORS

for potentially explosive atmospheres  
flameproof enclosure  
II2G Ex d IIB+H2 Gb T6...T4, II2D Ex tb IIIC Db IP66/IP67  
aluminium or stainless steel enclosure

Series  
**LPKF**  
**WSLPKF**

## FEATURES

- Explosionproof operator for use in potentially explosive atmospheres according to Directive ATEX 2014/34/EU
- EC type examination certificate (LCIE 10 ATEX 3043X) and IECEx certificate (IECEx LCI 10.0010X) are in compliance with the International and European Standards IEC and EN: 60079-0, 60079-1 and 60079-31
- Easy electrical installation by means of a screw terminal coil
- Enclosure provided with a 1/2 NPT threaded entry hole for a broad range of cable entries
- Ingress protection degree IP67 - NEMA 4/4X
- A wide range of valves can be supplied with the operator

## CONSTRUCTION

### Solenoid enclosure

LPKF  
WSLPKF  
LPKF  
WSLPKF

Aluminium, cataphoresis black painting  
Stainless steel (AISI 316L)  
Stainless steel  
Stainless steel (AISI 316L)  
Stainless steel  
Stainless steel  
VMQ  
FPM  
NBR  
Stainless steel  
Embedded screw terminals

### Bonnet

### Cover screws

### Core, core tube and plugnut

### Seals

### Upper disc

### Lower- disc

### Nameplate

### Coil connection

## ELECTRICAL CHARACTERISTICS

### Standard voltages

DC (=): 24V - 48V

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

## SAFETY CODE

II2G Ex d IIB+H2 Gb T6...T4

II2D Ex tb IIIC Db T85°C...T135°C IP66/IP67

## TEMPERATURE CLASSIFICATION TABLES

The minimum allowable ambient temperature is -40°C for the operator.

Select the requested "T" classification from the temperature classification table (AC or DC), respecting the maximum ambient temperature and cold (20°C) electrical holding power value.

AC (~) Solenoids

DC (=) Solenoids

| power level<br>(watt)  | insulation<br>class | maximum ambient temp. °C <sup>(5)</sup><br>“T” classification |    |    |
|------------------------|---------------------|---------------------------------------------------------------|----|----|
|                        |                     | T6                                                            | T5 | T4 |
| Low power (LP)         |                     |                                                               |    |    |
| -                      | -                   | -                                                             | -  | -  |
| 2.4 <sup>(2) (4)</sup> | F                   | 40                                                            | 65 | 80 |

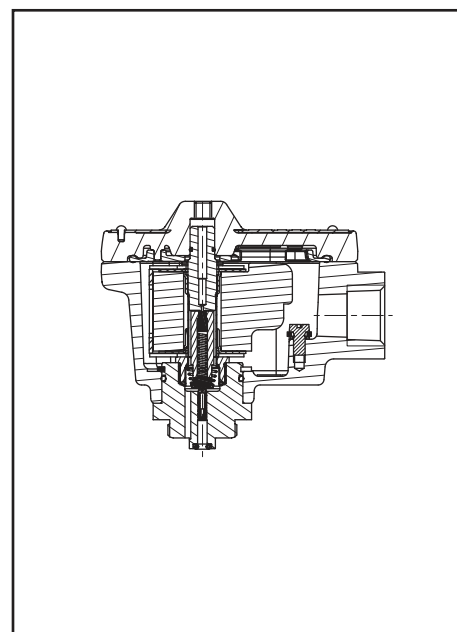
| power level (watt) | insulation class | maximum ambient temp. °C <sup>(5)</sup><br>“T” classification |    |    |
|--------------------|------------------|---------------------------------------------------------------|----|----|
|                    |                  | T6                                                            | T5 | T4 |
| Low power (LP)     |                  |                                                               |    |    |
| 0.5 <sup>(3)</sup> | F                | 60                                                            | -  | -  |
| 2.1 <sup>(4)</sup> | F                | 40                                                            | -  | 80 |

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

<sup>(3)</sup> 24 V DC value.

<sup>(4)</sup> Maximum cold wattage.

<sup>(5)</sup> For the layout of the control circuit, see the installation and maintenance instructions at: [www.asconumatics.eu](http://www.asconumatics.eu)



| LP        | RP            | MP            | BP            |
|-----------|---------------|---------------|---------------|
| 0,5W-2W   | Not available | Not available | Not available |
| Low power | Reduced power | Medium power  | Basic power   |

POWER LEVELS - cold electrical holding values (watt)



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PIC-8-32-GB

### PREFIX TABLE

| prefix |   |   |   |   |   |   | description                           | power level |    |    |    |
|--------|---|---|---|---|---|---|---------------------------------------|-------------|----|----|----|
| 1      | 2 | 3 | 4 | 5 | 6 | 7 |                                       | LP          | RP | MP | BP |
| L      | P | K | F |   |   |   | Flameproof- Aluminium (IEC/EN: 60079) | ●           | -  | -  | -  |
| W      | S | L | P | K | F |   | Flameproof- St. steel (IEC/EN: 60079) | ●           | -  | -  | -  |
|        |   |   |   |   |   | X | Other special constructions           | -           | -  | -  | -  |

- Available feature
- Not available

### 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: G551B305**

#### STEP 2

Select voltage. Refer to standard voltages on page 1.

**Example: 24V / DC**

#### 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: LPKF**

**60°C ambient**

**Low Power (LP) 0,5 W**

**II2G Ex d IIB+H2 Gb T6**

**II2D Ex tb IIIC Db IP67**

**T85°C**

#### STEP 4

Final catalogue / ordering number.

**Example:**

**LPKF 8551B305 24V / DC**

### ORDERING EXAMPLES:

|        |   |         |    |      |
|--------|---|---------|----|------|
| LPKF   | G | 551B305 | MO | 24V  |
| LPKF   | G | 551B305 | MO | 230V |
| WSLPKF | 8 | 551B305 |    | 24V  |
| WSLPKF | 8 | 551B305 |    | 230V |

prefix ————  
 pipe thread ————  
 basic number ————  
 voltage ————  
 suffix ————

### INSTALLATION

- Multi language installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- Internal and external earthing connection
- The solenoid can be rotated 360° to select the most favourable position for cable entry

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



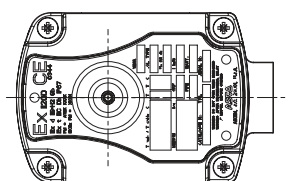
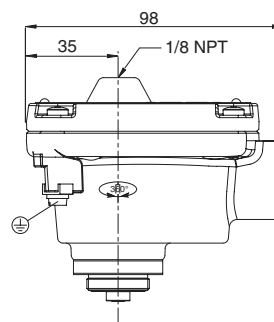
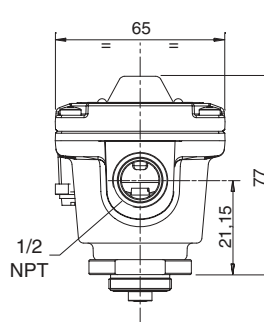
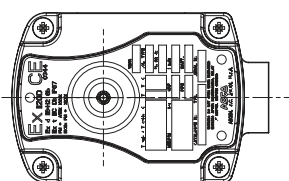
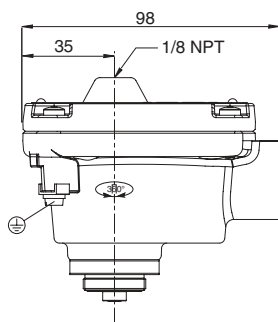
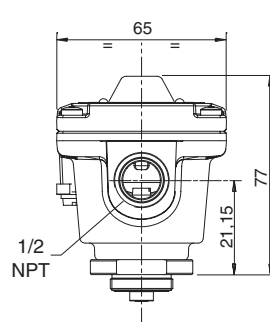
#### TYPE 01:

Prefix "LPKF" Solenoid  
Aluminium, revêtement époxy  
IEC and EN: 60079-1, 60079-31  
II2G Ex d IIB+H2 Gb T6...T4 - II2D Ex tb IIIC Db IP66/IP67



#### TYPE 02:

Prefix "WSLPKF" Solenoid  
Stainless steel, epoxy coated  
IEC and EN: 60079-1, 60079-31  
II2G Ex d IIB+H2 Gb T6...T4 - II2D Ex tb IIIC Db IP66/IP67



| type | prefix | weight |
|------|--------|--------|
| 01   | LPKF   | 0,55   |
| 02   | WSLPKF | 1,16   |