



# OPERATORS

for potentially explosive atmospheres  
 II 2 G/D Ex mb II T5.. T3 / Ex mD 21, IP67  
 encapsulated enclosure with integrated cable

Series

**PV**  
**(EM5)**

## FEATURES

- Explosionproof operator, intended for use in potentially explosive atmospheres according to Directive ATEX 94/9 EC
- EC type examination certificate (BAS 98 ATEX 2168 X) and IECEx certificate (IECEx SIR 06.0109X) are in compliance with the International and European Standards EN-IEC 60079-0, EN-IEC 60079-18, EN-IEC 61241-0 and EN-IEC 61241-18
- Easy electrical installation by means of the moulded-in supply cable, standard length 2 meters
- A thermal fuse is fitted in the coil winding and any excessive heating due to prolonged over-voltage or a locked core will cause the thermal fuse to operate
- Ingress protection degree (IP67)
- A wide range of valves can be supplied with the operator

## CONSTRUCTION

**Solenoid enclosure**  
**Core, tube, springs & plugnut**  
**Shading coil**  
**Nameplate**  
**Connection**

**EM5**  
 Epoxy encapsulated  
 Stainless Steel  
 Copper or Silver  
 Polyester  
 Integral 3 core tube

## ELECTRICAL CHARACTERISTICS

**Standard voltages:**  
 DC (-): 24V - 48V  
 AC (-): 24V - 48V - 115V - 230V / 50 Hz  
 (Other voltages and 60 Hz on request)

## SAFETY CODE

II 2G Ex mb II T5 to T3 (gas)  
 II 2D Ex mD 21 IP67 to 200°C (dust)

## 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

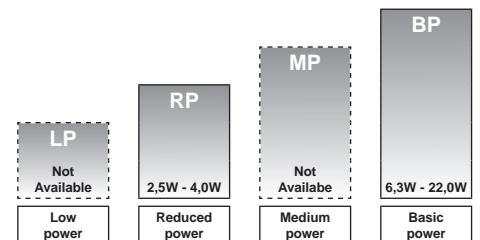
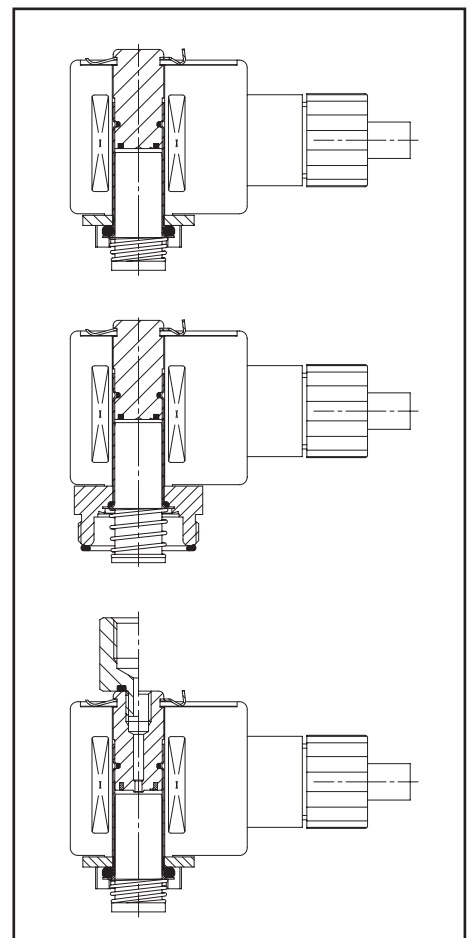
power level (watt)	insulation class	maximum ambient <sup>(1)</sup> temp. "T" classification			
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)	T3 (G) 200°C (D)
<b>Reduced power (RP)</b>					
2,5	F	-	-	60°C	65°C
4,0	F	-	-	60°C	65°C
<b>Basic power (BP)</b>					
6,3	F	-	-	-	65°C
10,0	F	-	-	-	65°C

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)	T3 (G) 200°C (D)
<b>Reduced power (RP)</b>					
3,0	F	-	40°C	60°C	60°C
<b>Basic power (BP)</b>					
6,9	F	-	-	-	40°C
15,0	F*	-	-	-	40°C
22,0	F*	-	-	-	40°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

\* Only to be used if E.D. is 10% or less (Energized Duty)



POWER LEVELS - cold electrical holding values (watt)

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



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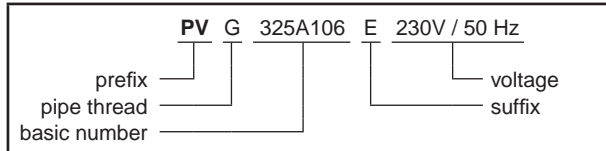
PIC-8-35-GB  
 传真：(86-532)585-10-365  
 Email：[sales@bechinas.com](mailto:sales@bechinas.com)

### PREFIX TABLE

prefix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
P	V						Encapsulated epoxy moulded (EN/IEC 60079-18, 61241-1)*	-	●	-	●
						X	Other special constructions	-	●	-	●

- Available feature
- Not available
- \* ATEX solenoids are also approved according to EN 13463-1 (non electrical valves)

### ORDERING EXAMPLES 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: G325A106**

#### 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 2.

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

#### Example: PV

**65°C ambient**  
**Basic Power (BP) 6,3W**  
**II 2G Ex mb II T3**  
**II 2D Ex mD 21 T200°C**

#### STEP 4

Final catalogue / ordering number.  
**Example:**  
**PV G325A106E 230V / 50 Hz**

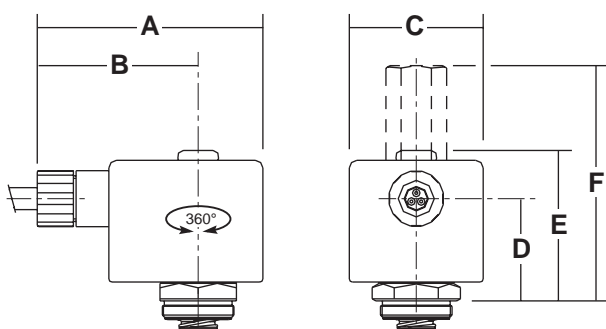
### ADDITIONAL OPTIONS

- Various lead lengths from 1 meter up to 10 meters

### INSTALLATION

- Multi language installation/maintenance instructions are included with each valve
- The solenoid operators can be mounted in any position without affecting operation (with the exception of manual reset versions)
- The operator can be rotated 360° to select the most favourable position for cable entry
- The solenoid shall be protected by a fuse capable of interrupting the prospective short circuit current

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



type	A	B	C	D	E	F	weight
PV-EM5	60	45	29	21	38,5	66	0,113

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