



OPERATORS

for potentially explosive atmospheres
II 2G Ex mb IIC T5..T3 Gb /
II 2D Ex mb IIC T100°C ..T200°C Db, IP67
encapsulated enclosure with integrated cable

Series

PV
(EM5)

FEATURES

- Explosionproof operator, intended for use in potentially explosive atmospheres according to Directive ATEX 2014/34/EU
- 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 and EN-IEC 60079-18
- 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 IIC T5 to T3 Gb (gas)
II 2D Ex mb IIC 100°C to 200°C Db IP67 (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

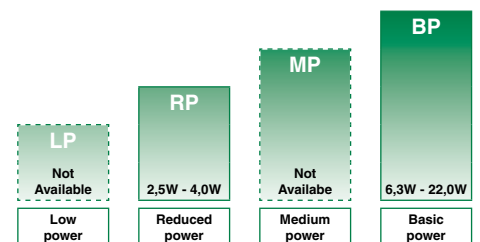
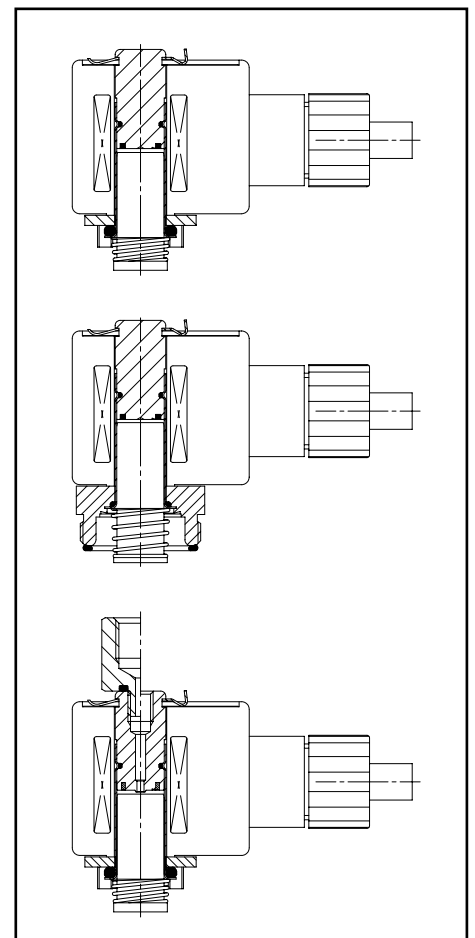
power level (watt)	insulation class	maximum ambient ⁽¹⁾ temp. "T" classification			
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)	T3 (G) 200°C (D)
Reduced power (RP)					
2,5	F	-	-	60°C	65°C
4,0	F	-	-	60°C	65°C
Basic power (BP)					
6,3	F	-	-	-	65°C
10,0	F	-	-	-	65°C

DC (=) Solenoids

power level (watt)	insulation class	maximum ambient ⁽¹⁾ temp. "T" classification			
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)	T3 (G) 200°C (D)
Reduced power (RP)					
3,0	F	-	40°C	60°C	60°C
Basic power (BP)					
6,9	F	-	-	-	40°C
15,0	F*	-	-	-	40°C
22,0	F*	-	-	-	40°C

⁽¹⁾ 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)



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PREFIX TABLE

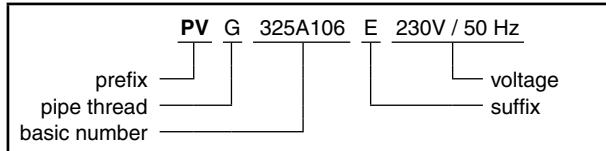
prefix							description		power level			
1	2	3	4	5	6	7			LP	RP	MP	BP
P	V						Encapsulated epoxy moulded (EN/IEC 60079-18)*		-	●	-	●
						X	Other special constructions		-	●	-	●

● 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 IIC T3 Gb

II 2D Ex mb IIIC T200°C Db

STEP 4

Final catalogue / ordering number.

Example:

PV G325A106E 230V / 50 Hz

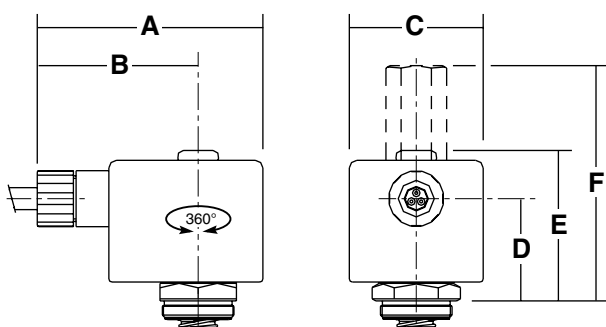
ADDITIONAL OPTIONS

- 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