

ASCO™ Operators

For Potentially Explosive Atmospheres

II 2G Ex mb IIC T5..T3 Gb / II 2D Ex mb IIIC T100°C..T200°C Db IP67

Encapsulated, Moulded Enclosure with Integrated Cable



Series
PV

Features and Benefits

- Explosionproof operator for use in potentially explosive atmospheres according to ATEX-Directive 2014/34/EU
EC type examination certificate no.: **BAS 98 ATEX 2168 X**
IECEX Certificate of Conformity no.: **IECEX SIR 06.109X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards EN-IEC 60079-0 and EN-IEC 60079-18
- Easy electrical installation with moulded-in supply cable, 2 m long
- Ingress protection degree IP67
- The operators are designed for installation on a wide range of valves



Construction

Solenoid enclosure

Core tube

Plugnut

Shading coil

Nameplate

Safety code

Epoxy encapsulated

Stainless steel

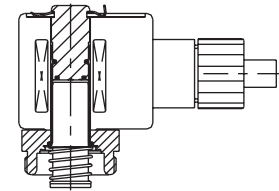
Stainless steel

Copper or silver

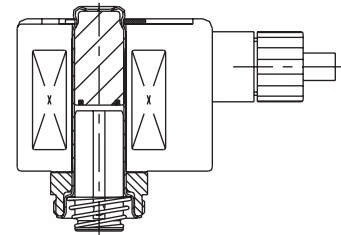
Polyester

IECEX / Ex II 2G Ex mb IIC T5..T3 Gb

IECEX / Ex II 2D Ex mb IIIC 100°C..200°C Db IP67



EM5



EMXX

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 (.)

DC solenoids (=)

Pn (watt)	Solenoid size		Maximum ambient °C ⁽¹⁾ Surface temperature			
	EM5	EMXX	T6 85°C	T5 100°C	T4 135°C	T3 200°C
Insulation class F (155°C) 100% E.D.						
2.5	•		-	-	60	65
4.0 ⁽²⁾	•		-	-	60	65
4.05		•	-	-	-	65
6.3 ⁽³⁾	•		-	-	-	65
10.5		•	-	-	-	65
Insulation class F (155°C) 10% E.D.						
10.0	•		-	-	-	65

Pn (watt)	Solenoid size		Maximum ambient °C ⁽¹⁾ Surface temperature			
	EM5	EMXX	T6 85°C	T5 100°C	T4 135°C	T3 200°C
Insulation class F (155°C) 100% E.D.						
1.7		•	65	-	-	-
3.0 ⁽⁴⁾	•		-	40	60	60
6.9 ⁽⁵⁾	•		-	-	-	40
11.2		•	-	-	65	70
19.7	•		-	-	40	70
Insulation class F (155°C) 10% E.D.						
15.0	•		-	-	-	40
22.0	•		-	-	-	40

Check the wattage compatibility with the product selected.

⁽¹⁾ Allowable minimum ambient temperature: -40°C.

Actual temperature range may be limited depending on valve operation limits.

⁽²⁾ AC series 189 - 189 banjo - 551 integrated pilot

⁽³⁾ AC series 553

⁽⁴⁾ DC series 189 - 189 banjo - 551 integrated pilot

⁽⁵⁾ DC series 553

Connections

- The solenoid can be rotated through 360° to select the most favourable position for the cable.

Ordering information on exceptions

- PV + 18901... , for series: 189 - 189 banjo

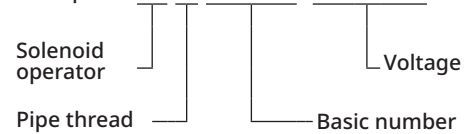
Example: PV 18901001 230V/50 Hz
 PV 18901010 24V/DC
 PV 18901032 230V/50 Hz
 PV 18901047 24V/DC

ORDERING INFORMATION

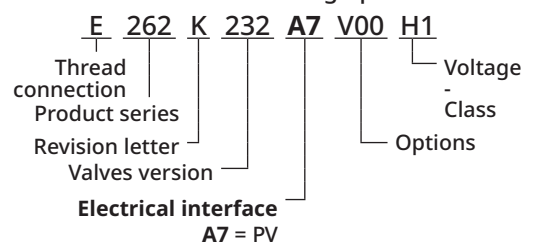
(See Ordering Information on Exceptions)

A valve with the explosionproof operator will be identified with the prefix PV before the catalogue number.

Example: PV E 210D095 230V/50 Hz

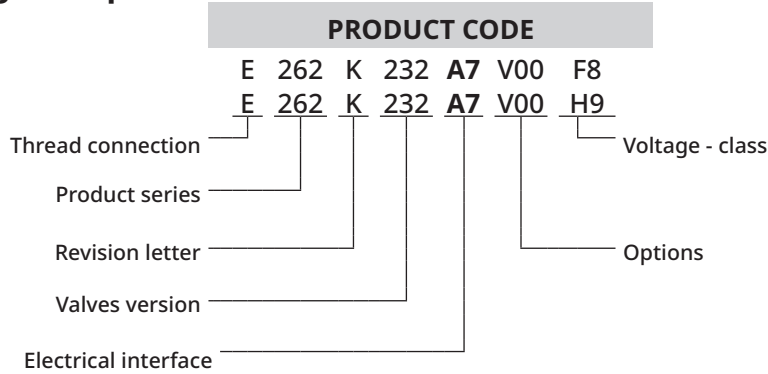


A valve supplied with the explosionproof operator will be identified with electrical interface A7 in the 15-digit product code.

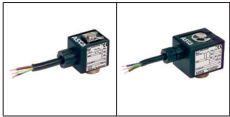


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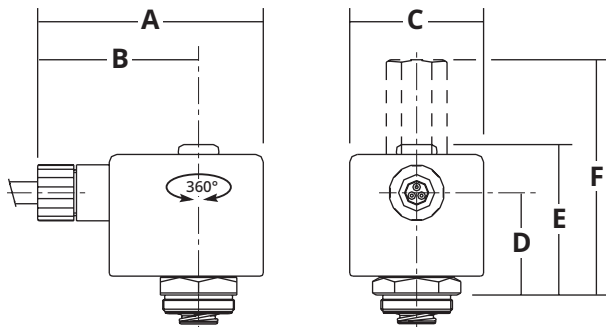
Ordering Examples Valves:



Dimensions (mm), Weight (kg)



TYPE PV
 Prefix "PV" solenoids / Electrical interface A7
 Epoxy coated
 EN-IEC 60079-18
 II 2G Ex mb IIC Gb - II 2D Ex mb IIIC Db IP67



Size	A	B	C	D	E	F	Weight ⁽¹⁾
EM5	60	45	29	21	38.5	66	0.113
EMXX	75	53.5	44.5	33.6	49.4	77.3	0.348