

# **SOLENOID VALVES**

pilot operated, single flow floating piston for petrol vending 3/4

NC

IEC TECEX



2/2 Series 291

### **FEATURES**

- The normally closed petrol dispensing valves are especially designed to meet the particular needs for the fuel dispensers
- The high quality polyphenylene sulfide piston guarantees a long operating life and a wide temperature range. Hydrocarbon resistant FPM seal material for tight shut off
- Choice of explosion proof operators, intended for use in potentially explosive atmospheres, according to Directive ATEX 94/9/EC
- Solenoid ingress protection degree ≥ IP65
- · ASCO Numatics components satisfy all relevant EC directives

#### **GENERAL**

**Differential pressure** 0,3 - 3,5 bar [1 bar = 100kPa]

Ambient temperature range -40 to +70°C

fluids (*)	temperature range (TS)	seal materials (*)
Petrol & Liquid fuels	-40 to +70°C	FPM (fluoroelastomer) / VMO (silicone)

## **MATERIALS IN CONTACT WITH FLUID**

(\*) Ensure that the compatibility of the fluids in contact with the materials is verified

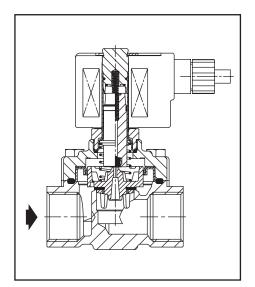
Body Brass
Bonnet Brass

Core tubeStainless steelCore and plugnutStainless steel

Core discFPMCore guidePOMRider ringPTFE

SpringsStainless steelSealingFPM / VMQ

PistonPPSPiston discFPMLip sealPTFEPiston supportBrass



# **ELECTRICAL CHARACTERISTICS**

Coil insulation class F
Electrical safety IEC 335

Standard voltages DC (=) 24V - 48V

	power	ratings	operator				<b>4</b> 1.00 a (1)	
prefix	holding	hot/cold	ambient temperature	safety code	electrical enclosure	replacen		
option	~	=	range (TS)	protection (EN 60529)		~	=	type (1)
	(W)	(W)	(C°)		(	230V/50/60 Hz	24V/DC	
PV	-	9,0 / 11,2	-40 to +65	II 2 G Ex mb II T4	moulded IP67	-	(2)	01
ZN	-	9,0 / 11,2	-20 to +50	II 3 G EEx nA II T3	moulded IP65	-	(2)	02
EF	-	9,0 / 11,2	-40 to +55	NEMA type 7 and 9	Nema 4X	-	238714-006D	03
SC	-	9,0 / 11,2	-40 to +55	EN 60730	moulded IP65	-	400425-142	04

- (1) Refer to the dimensional drawings on page 6
- <sup>2)</sup> Multiple coils kits available under ATEX, contact us
- Not available

#### **SPECIFICATIONS**

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		NEMA	pre	basic catalogue				
				!	max. PS	7&9	Ex d	Ex e mb	Ex mb	EEx <b>nA</b>	IP65	number
G	(mm)	(m³/h)	(l/min)	min	=	<b>EF</b> (1)	NF	EM	PV	ZN	SC	
NC -	NC - Normally closed											
3/4	20	3,9	65	0,3	3,5	•	-	-	•	•	•	G291A110

- Available feature
- Not available
- \* For description of solenoids see page 31-40
- Preax EF should always be used in conjunction with change letter G in the basic number

X020GB-2009/R0 - X020-02-010
Availability, design and specidcations are subject to change without notice All rights reserved



# **INSTALLATION**

- The valves can be mounted in any position without affecting operation
- Pipe connection identider is: G = pipe thread according to ISO 228/1
- Installation/maintenance instructions are included with each valve
- PV solenoids have a standard cable length of 2 meters. Other lengths in full meters are available on request
- SC/ZN solenoids are supplied with ISO 4400 spade plug connectors (cable Ø 6-10 mm)

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





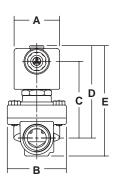
TYPE 01 Preax "PV" Solenoid Epoxy encapsulated EN-IEC 60079-0, 60079-18, 61241-0, 61241-18 II 2 G/D Ex mb II / Ex mD IP67

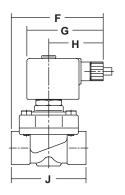


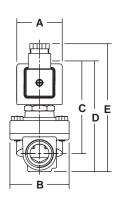
Preax "ZN" Solenoid Epoxy moulded EN 50021 II 3 G/D EEx nA II IP65

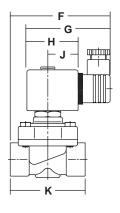
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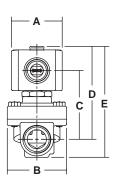
TYPE 03 Preax "EF" Solenoid Epoxy encapsulated ICS-6 ANSI / NEMA Type 7 and 9 (applicable to solenoid only)

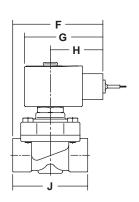


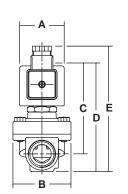
TYPE 04 Preax "SC" Solenoid Epoxy moulded IEC 335 / ISO 4400 IP65

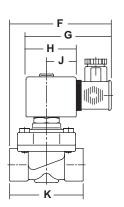
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type	AC/DC	prefix option	catalogue number	spare parts kits	Α	В	С	D	Е	F	G	Н	J	K	weight
01	=	PV	G291A110	PVC117690	45	58	75	91	108	90	75	54	73	-	1,2 kg
02	=	ZN	G291A110	ZNC117690	45	58	91	108	125	98	82	50	30	73	1,1 kg
03	=	EF	G291G110	EFC117690	50	58	67	91	108	88	77	51	73	-	1,3 Kg
04	=	SC	G291A110	C117690	45	58	91	108	125	102	85	50	30	73	1,1 Kg