

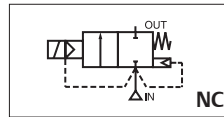
ASCO™ Solenoid Valves

high pressure, single flow pilot operated for LPG applications, 1/2 to 3/4

2/2
SERIES
291

Features

- The normally closed LPG valves are especially designed to meet the particular heavy duty requirements of LPG applications
- Single flow execution for self service systems
- Explosion proof operator, intended for use in potentially explosive areas, according to Directive 2014/34/EU
- Easy electrical installation by means of the moulded-in supply cable, standard length of 2 meter
- ASCO™ components satisfy all relevant EC directives



General

Differential pressure 0 - 25 bar [1 bar = 100kPa]
Ambient temperature range -20 to +65°C (FPM execution)
-40 to +65°C (PTFE execution)

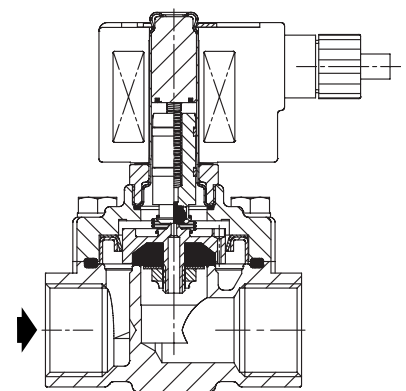
fluids (*)	temperature range (TS)	seal materials (*)
LPG / Liquid	-20 to +65°C	FPM (fluoroelastomer) / VMQ (silicone)
LPG / Liquid	-40 to +65°C	PTFE (**)



Materials in contact with fluid

(*) Ensure that the compatibility of the fluids in contact with the materials is verified
(**) Specify suffix T behind catalogue number for the PTFE execution

Body & Bonnet	Brass
Core tube	Stainless steel
Core and plugnut	Stainless steel
Piston	Stainless steel
Core & Piston disc	FPM or PTFE
Rider ring	PTFE
Springs	Stainless steel



Electrical Characteristics

Coil insulation class F
Electrical safety IEC 335
Standard voltages DC (=) 24V - 48V;
AC (~) 24V - 48V - 115V - 230V / 50 Hz

prefix option	power ratings		operator ambient temperature range (TS) (C°)	safety code	electrical enclosure protection (EN 60529)	replacement coil		type ⁽¹⁾
	holding ~ (W)	hot/cold = (W)				~	=	
	230V/50/60 Hz	24V/DC						
PV	10,5	-	-40 to +65	II2G Ex mb IIC Gb T3, II2D Ex mb IIIC Db	moulded IP67	⁽²⁾	-	01
(WS)EM	-	12,0 / 16,8	-40 to +40	II2G Ex eb IIC Gb T3, II2D Ex tb IIIC Db	SS / moulded IP67	400909-117	400914-142	02
SC	10,5	12,0 / 16,8	-40 to +65	EN 60730	moulded IP65	400425-117	400625-142	03 & 04

⁽¹⁾ Refer to the dimensional drawings on page 20
⁽²⁾ Multiple coils kits available under ATEX, contact us
- Not available

Specifications

pipe size	orifice size (mm)	flow coefficient Kv (m³/h) (l/min)		operating pressure differential (bar) min ~ =			prefix optional solenoids *						basic catalogue number
							NEMA 7&9	ATEX / IECEx				IP65	
								Ex d	Ex e mb	Ex mb	EEx nA		
G	(mm)	(m³/h)	(l/min)	min	~	=	EF	NF	EM	PV	ZN	SC	
NC - Normally closed													
1/2	19	4,0	66,7	0	25	17	-	-	●	□	-	●	G291A310
3/4	19	4,0	66,7	0	25	17	-	-	●	□	-	●	G291A320

● Available feature □ Available feature in AC only
- Not available

Additional Options

- Other explosionproof enclosures for use in zone 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU
- Explosionproof and watertight solenoids according to "NEMA" standards

Installation

- The valves can be mounted in any position without affecting operation
- Pipe connection identifiers: 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

Dimensions (mm), Weight (kg)

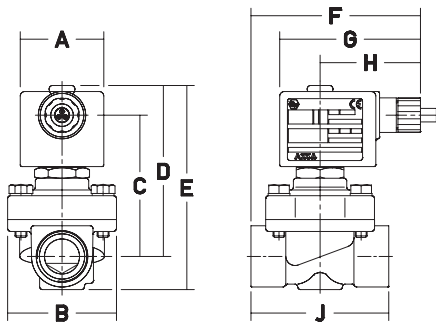


TYPE 01
Prefix "PV" Solenoid
Epoxy encapsulated
II2G Ex mb IIC Gb T3, II2D Ex mb IIIC Db
IP67

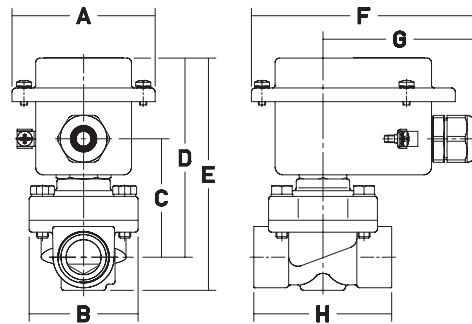


TYPE 02
Prefix "EM" and "WSEM" Solenoid
Zinc plated steel, epoxy coated (EM)
Stainless steel, AISI 316 (WSEM)
II2G Ex eb IIC Gb T3, II2D Ex tb IIIC Db
IP67

G291A321 / A320



G291A310 / A320

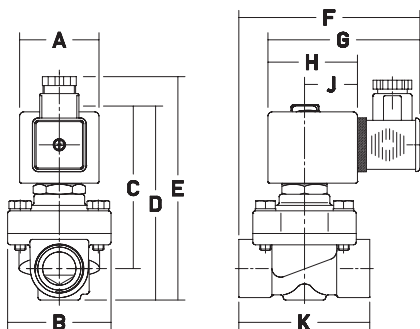


TYPE 03
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

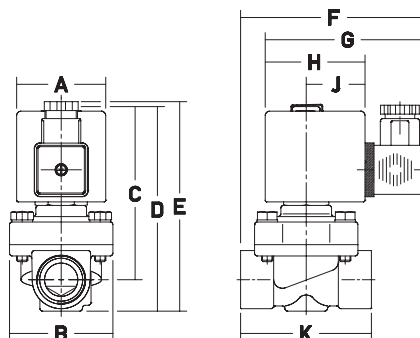


TYPE 04
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

G291A310 / A320



G291A310 / A320



type	AC/DC	prefix option	catalogue number	spare parts kit	A	B	C	D	E	F	G	H	J	K	weight
01	~	PV	G291A310	PVC144067	45	58	71	85	101	88	75	54	70	-	1,1 Kg
01	~	PV	G291A320	PVC144064	45	58	75	91	109	90	75	54	73	-	1,2 Kg
02	~/=	(WS)EM	G291A310	EMC144072	76	58	59	102	116	120	82	70	-	-	1,3 Kg
02	~/=	(WS)EM	G291A320	EMC144069	76	58	63	106	124	120	82	73	-	-	1,4 Kg
03	~	SC	G291A310	C144067	45	58	87	101	118	100	85	50	30	70	1,0 Kg
03	~	SC	G291A320	C144064	45	58	91	109	125	102	85	50	30	73	1,1 Kg
04	=	SC	G291A310	C144072	50	58	93	107	110	103	91	56	33	70	1,2 Kg
04	=	SC	G291A320	C144069	50	58	97	115	118	105	91	56	33	73	1,3 Kg

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