# ASCO™ Solenoid Valves

For Vacuum Service

Direct Operated, 1/4" Tapped

2/2 NC Series **262** 

#### **Features and Benefits**

- Special materials and handling procedures are used in the high vacuum valves to avoid molecular contamination
- The high vacuum valves are mass spectrometer tested
- Valves do not require a minimum operating pressure and are suitable for low, high vacuum
- Valve operation is not affected by mounting position
- Compliance with UL and CSA standards
- The solenoid valves satisfy all relevant EU directives

#### General

**Differential pressure** See «SPECIFICATIONS» [1 bar =100 kPa]

Maximum viscosity65 cSt (mm²/s)Response time5 - 25 ms

Fluids (*)	Temperature range (TS)	Seal materials (*)
air, inert gas	-25°C to +80°C	NBR (nitrile)
all, lifert gas	-15°C to +80°C	FPM (fluoroelastomer)

## Materials of components in contact with fluid

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

Body Brass Shading coil Copper

Core tube Stainless steel, AISI 305
Core and plugnut Stainless steel, AISI 430F
Springs Stainless steel, AISI 302

Seal NBR or FPM Disc NBR or FPM

#### **Electrical characteristics**

Coil insulation class F (AC) or H (DC)

**Connector** Spade plug (cable Ø 6-10 mm) **Connector specification** ISO 4400 / EN 175301-803, form A

Electrical safety IEC 335

**Electrical enclosure protection Standard voltages**Moulded IP65 (EN 60529)

DC (=): 24V - 48V

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

	Operator		Pow	er ratings	Replacement coil (1)					
	ambient temperature	Inrush	Hole	ding	Hot/cold	Replacement con				
	range (TS)	~	~		=	~	=			
ĺ	(°C)	(VA)	(VA) (W)		(W)	230 V/50 Hz	24 V DC			
ĺ	-25 to +55	30	16	8.1	7.7/ 10.6	238213-059	238513-006			

(1) All 238 basic numbers are UL & CSA approved and marked with the UR (recognised component) & CSA logos.

## **Options**

• Seals and disc (\*) <sup>(2)</sup> FPM (fluoroelastomer): (fluid temperature range) -15°C to +100°C (coil class F) -15°C to +120°C (coil class H)

 Connector with visual indication and peak voltage suppression or with cable length of 2 m

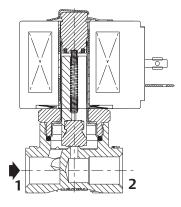
 Explosion proof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (See page 2)

(2) The minimum ambient temperature of the solenoid valve is determined by the limitations of minimum temperature indicated.







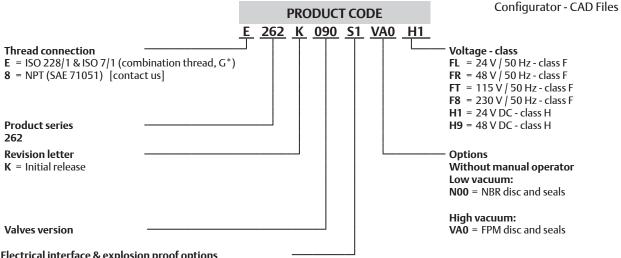


NC function

Specific	ations								PRODUCT	СО	DE				
Pipe	Orifice size Flow coefficient Kv Minimus			nimum absolute vacuum pressure (PS)	Power coil (W)			/ suo			Vol 2	ltag ¥		ode	e
size			Max. (PS) Air (*)	Max. (PS)		Brass	/50 Hz	501	N/50	N/50	100	20			
	(mm)	(m³/h) (l/m	1	mbar (Torr)	~ =		Thre	Dim Eype		24 V	48 V	115	230	24 V	48 V
	Without manual operator											Ì			
NC - Nor	NC - Normally closed, low vacuum range to 25 Torr, NBR seals														
1/4"	7.1	0.76 12.	1 -	33.3 (25)	8.1	10.6	G*	01	E262K090S1N00						
NC - Nor	NC - Normally closed, high vacuum range to 10 <sup>-6</sup> Torr, FPM seals								FL	FR	FT	F8	Н1	H9	
1/4"	7.1	0.76 12.	7 0	1.33.10 <sup>-6</sup> (10 <sup>-6</sup> )	8.1	10.6	G*	01	E262K090S1VA0						

<sup>(\*)</sup> Ensure that compatibility of materials in contact with fluids is verified.

<sup>(1)</sup> For dimensions, see drawing(s) for each construction type on the following page(s).



#### Electrical interface & explosion proof options

- S1 = With spade plug connector
- FN = Aluminium enclosure, 1/2 NPT conduit, IECEx/ATEX
  - II 2G Ex db IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to NF prefix)  $\!\!^{(2)}$
- = Aluminium enclosure, 20 mm conduit, IECEx/ATEX
  - II 2G Ex db IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to NFET prefix)(2)
- FS = AISI 316L enclosure, 1/2 NPT conduit, IECEX/ATEX
  - II 2G Ex db IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to WSNF prefix)(2)
- = AISI 316L enclosure, 20 mm conduit, IECEx/ATEX
  - II 2G Ex db IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to WSNFET prefix)  $^{\!(2)}$
- MV = Steel enclosure, M20 cable gland, IECEx/ATEX
  - II 2G Ex eb mb IIC Gb/II2D Ex tb IIIC Db, zone 1-21 (equivalent to EM prefix)(2)
- MT = Steel enclosure, 20 mm conduit, IECEx/ATEX
  - II 2G Ex eb mb IIC Gb/II2D Ex tb IIIC Db, zone 1-21 (equivalent to EMET prefix)(2)
- MN= Steel enclosure, 1/2 NPT conduit, IECEx/ATEX
  - II 2G Ex eb mb IIC Gb/II2D Ex tb IIIC Db, zone 1-21 (equivalent to EMT prefix)(2)
- MW= AISI 316L enclosure, M20 cable gland, IECEx/ATEX
  - II 2G Ex eb mb IIC Gb/II2D Ex tb IIIC Db, zone 1-21 (equivalent to WSEM prefix)(2)
- MU= AISI 316L enclosure, 20 mm conduit, IECEx/ATEX
  - II 2G Ex eb mb IIC Gb/II2D Ex tb IIIC Db, zone 1-21 (equivalent to WSEMET prefix)(2)
- = AISI 316L enclosure, 1/2 NPT conduit, IECEx/ATEX
  - II 2G Ex eb mb IIC Gb/II2D Ex tb IIIC Db, zone 1-21 (equivalent to WSEMT prefix) $^{(2)}$
- A7 = Moulded enclosure, epoxy encapsulated, integrated cable, IECEx/ATEX II 2G Ex mb IIC Gb / II 2D Ex mb IIIC Db, zone 1-21 (equivalent to PV prefix)(2)
- **SG** = Moulded coil with connector, epoxy encapsulated, ATEX
  - II 3GD Ex ec IIC Gc / II 3GD Ex tc IIIC Dc, zone 22 (equivalent to SG prefix)(2)(3)

<sup>(2)</sup> Search prefix in Emerson.com/ASCO to get detailed technical information. Please note that the valve pressure ratings with some of the ATEX enclosures will be reduced. To obtain the correct pressure rating please check the landing pages of the "2-Way Solenoid Valve DIN Configurator".

<sup>(3)</sup> Coils class F only.

		Spare parts kits no. (*)							
		AC (~)			DC (=)				
			NBR	FPM		NBR	FPM		
	E262K090S1N00	M200001	N00	-	M200005	NOO	-		
THE REPORT OF THE PARTY OF THE	E262K090S1VA0	M200001	-	VA0	M200005	-	VA0		

	Accessories code
Mounting bracket Steel version (AISI 1010 / 1.1121)	M200094A00
Mounting bracket Stainless steel version (AISI 304 / 1.4301)	M200095A00

#### Installation

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valves have 2 mounting holes in body
- Thread connection "E" have standard thread according to ISO 228/1 and ISO 7/1
  Thread connection "8" have standard thread = NPT (SAE 71051)
- Installation/maintenance instructions are included with each valve

# **262**

# **ASCO™ Solenoid Valves**

## Dimensions (mm), Weight (kg)

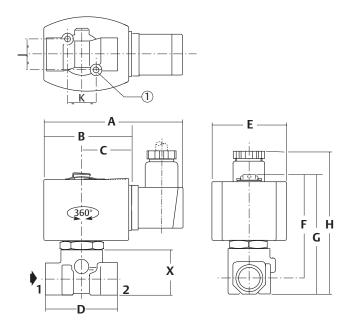


Configurator - CAD Files



**TYPE 01** Electrical interface "S1" Epoxy moulded IEC 335 / ISO 4400

1/4", power coil 8.1 W / 10.6 W



Туре	Pipe size	A	В	С	D	E	F	G	н	х	Weight (1)
01	1/4"	88	51	30	40	43	65	75	92	30	0.42

1 2 mounting holes: M5 dia., depth 7.5 mm (1/4")

<sup>(1)</sup> Incl. coil(s) and connector(s).



## **Mounting bracket**

Steel or stainless steel

#### M200094A00 / M200095A00

