

## FEATURES

- 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 viscosity** 65 cSt (mm<sup>2</sup>/s)  
**Response time** 5 - 25 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas	-25°C to +80°C	NBR (nitrile)
		FPM (fluoroelastomer)



## GENERAL

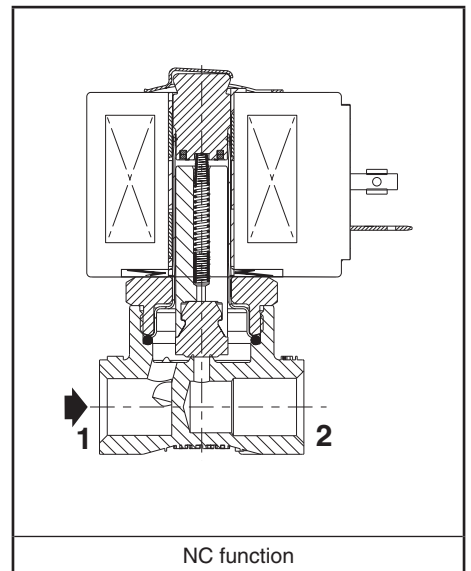
### MATERIALS IN CONTACT WITH FLUID

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

<b>Body</b>	Brass
<b>Shading coil</b>	Copper
<b>Core tube</b>	Stainless steel, AISI 305
<b>Core and plugnut</b>	Stainless steel, AISI 430F
<b>Springs</b>	Stainless steel, AISI 302
<b>Seal</b>	NBR or FPM
<b>Disc</b>	NBR or FPM

## ELECTRICAL CHARACTERISTICS

<b>Coil insulation class</b>	F (AC) or H (DC)
<b>Connector</b>	Spade plug (cable Ø 6-10 mm)
<b>Connector specification</b>	ISO 4400 / EN 175301-803, form A
<b>Electrical safety</b>	IEC 335
<b>Electrical enclosure protection</b>	Moulded IP65 (EN 60529)
<b>Standard voltages</b>	DC (=) : 24V - 48V
(Other voltages and 60 Hz on request)	AC (~) : 24V - 48V - 115V - 230V/50 Hz



operator ambient temperature range (TS) (°C)	power ratings			replacement coil <sup>(1)</sup>	
	inrush ~ (VA)	holding ~ (VA)	hot/cold = (W)	~	=
-25 to +55	30	16	8,1	7,7/ 10,6	238213-059 238513-006

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

## OPTIONS

<b>Seals and disc (*) <sup>(2)</sup></b> (fluid temperature range)	FPM (fluoroelastomer): -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 ( <a href="http://www.asco.com">www.asco.com</a> )	
Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (See page 2)	

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

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

**SPECIFICATIONS**

pipe size	orifice size (mm)	flow coefficient Kv (m <sup>3</sup> /h)/(l/min)	minimum absolute vacuum pressure				power coil (W)	thread type	dimensions / type (1)	15-DIGIT PRODUCT CODE														
			(PS)		max. (PS)					air (*)	mbar (Torr)	brass	voltage code											
			min.										24 V/50 Hz	48 V/50 Hz	115 V/50 Hz	230 V/50 Hz	24 V/DC	48 V/DC						
<b>WITHOUT MANUAL OPERATOR</b>																								
<b>NC - Normally closed, low vacuum range to 25 Torr, NBR seals</b>																								
1/4	7,1	0,76	12,7	0	33,3 (25)	8,1	10,6	G*	01	<b>E262K090S1N00</b>														
<b>NC - Normally closed, high vacuum range to 10<sup>-6</sup> Torr, FPM seals</b>													FL		FR		FT		F8		H1		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	<b>E262K090S1VA0</b>														

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

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

[Configurator - CAD Files](#)

**15-DIGIT PRODUCT CODE**
**E 262 K 090 S1 VA0 H1**
**Thread connection**

**E** = ISO 228/1 & ISO 7/1 (combination thread, G\*)  
**8** = NPT (SAE 71051) [contact us]

**Product series**  
**262**

**Revision letter**  
**K** = Initial release

**Valves version**
**Voltage - class**

**FL** = 24 V / 50 Hz - class F  
**FR** = 48 V / 50 Hz - class F  
**FT** = 115 V / 50 Hz - class F  
**F8** = 230 V / 50 Hz - class F  
**H1** = 24 V DC - class H  
**H9** = 48 V DC - class H

**Options**

**Without manual operator**  
**Low vacuum:**  
**N00** = NBR disc and seals

**High vacuum:**  
**VA0** = FPM disc and seals

**Electrical interface & explosion proof options**

- S1** = With spade plug connector  
**FN** = Aluminium enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [NF](#) prefix)<sup>(2)</sup>  
**FT** = Aluminium enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [NFET](#) prefix)<sup>(2)</sup>  
**FS** = AISI 316L enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSNF](#) prefix)<sup>(2)</sup>  
**FU** = AISI 316L enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSNFET](#) prefix)<sup>(2)</sup>  
**MV** = Steel enclosure, M20 cable gland, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [EM](#) prefix)<sup>(2)</sup>  
**MT** = Steel enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db, zone 1-21 (equivalent to [EMET](#) prefix)<sup>(2)</sup>  
**MN** = Steel enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [EMT](#) prefix)<sup>(2)</sup>  
**MW** = AISI 316L enclosure, M20 cable gland, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSEM](#) prefix)<sup>(2)</sup>  
**MU** = AISI 316L enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSEMET](#) prefix)<sup>(2)</sup>  
**MS** = AISI 316L enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSEMT](#) prefix)<sup>(2)</sup>  
**A7** = Moulded enclosure, epoxy encapsulated, integrated cable, IECEx/ATEX  
 II2G Ex mb IIC Gb T3(-)/T4(=), II2D Ex mb IIIC Db IP67, zone 1-21 (equivalent to [PV](#) prefix)<sup>(2)</sup>  
**SG** = Moulded coil with connector, epoxy encapsulated, ATEX  
 II 3 D Ex tc IIIC T115°C Dc IP65X, zone 22 (equivalent to [SG](#) prefix)<sup>(2)</sup>

<sup>(2)</sup> Search prefix in [asco.com](#) 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](#)".


		SPARE PARTS KITS CODE (*)					
		AC (~)			DC (=)		
		NBR	FPM		NBR	FPM	
	E262K090S1N00	M200001	N00	-	M200005	N00	-
	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

01470GB-2018/R01  
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**DIMENSIONS (mm), WEIGHT (kg)** 

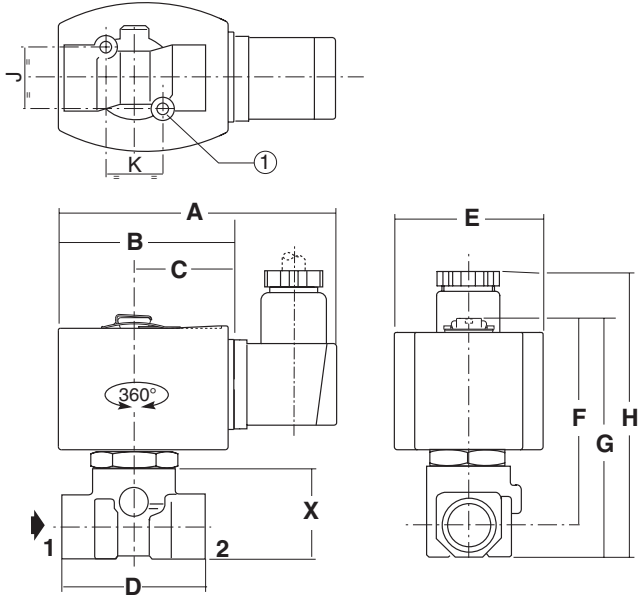
[Configurator - CAD Files](#)



**TYPE 01**

Electrical interface "S1"  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

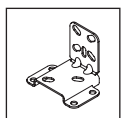
1/4, power coil 8,1 W / 10,6 W



type	pipe size	A	B	C	D	E	F	G	H	X	weight <sup>(1)</sup>
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)

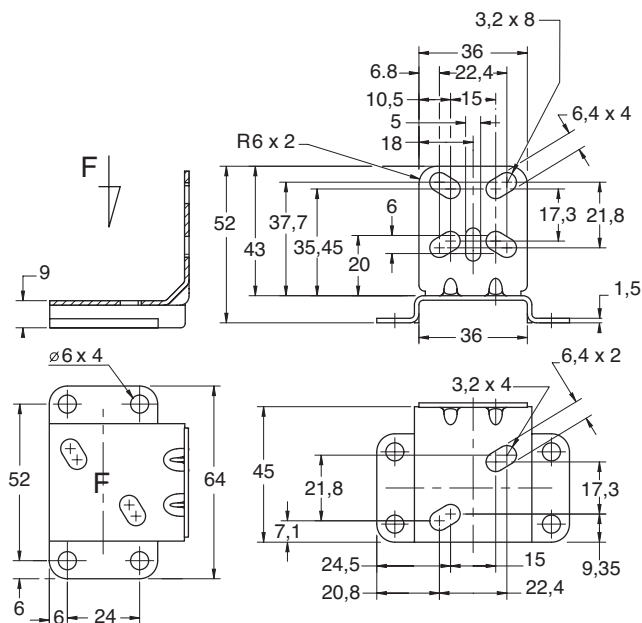
<sup>(1)</sup> Incl. coil(s) and connector(s).



**Mounting bracket**

Steel or stainless steel

M200094A00 / M200095A00



**4 - Vacuum Service (2/2)**