

# ASCO™ Solenoid Valves

For High Pressure Fluids

Direct Operated, 3/8" tapped

2/2 NC-NO

Series

**263**

- High operating pressure
- RoHS compliance
- AC/DC interchangeability of the coil (10,1 W/11,6 W and 17,1 W/22,6 W)
- Valves do not require a minimum operating pressure
- Large selection of seal materials providing wide chemical compatibility
- 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, water, oil	-25°C to +80°C	NBR (nitrile)

## Materials in contact with fluid

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

<b>Body</b>	Brass or Stainless steel, AISI 304
<b>Shading coil</b>	Copper or Silver
<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
<b>Disc</b>	NBR
<b>Core guide</b>	CA

## Electrical characteristics

**Coil insulation class** F/H (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** Moulded IP65 (EN 60529)  
**Standard voltages** DC (=) : 24V - 48V  
 AC (-) : 24V - 48V - 115V - 230V/50 Hz  
 (Other voltages and 60 Hz on request)

operator ambient temperature range (TS) (°C)	power ratings				replacement coil <sup>(1)</sup>	
	inrush ~ (VA)	holding ~ (VA)	hot/cold = (W)	hot/cold = (W)	~	=
-25 to +55	30	16	8,1	7,7/ 10,6	238213-059	238513-006
	45	20	11,1	12,5/18,6	238213-157	238513-106
	50	25	10,1	8,5/11,6	238613-059	238913-006
	70	40	17,1	15,1/22,6	238613-159	-
	70	40	17,1	15,1/22,6	238813-159	238913-106

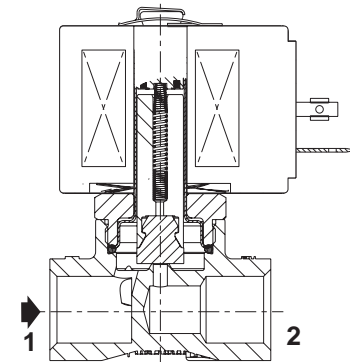
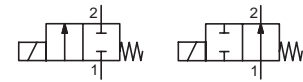
<sup>(1)</sup> All 238 basic numbers are UL & CSA approved and marked with the UR (recognised component) & CSA logos.

## Options

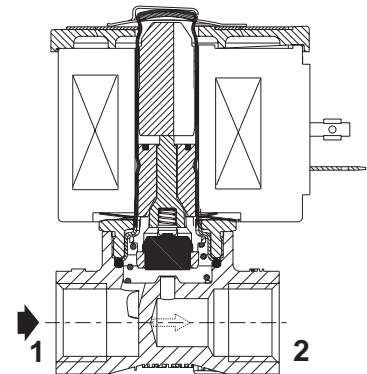
- Seals and disc (τ) <sup>(2)</sup> (fluid temperature range)
  - FPM (fluoroelastomer): -15°C to +100°C (coil class F) -15°C to +120°C (coil class H)
  - EPDM (ethylene-propylene), 0°C to +100°C
  - CR (chloroprene), 0°C to +80°C
  - PTFE: -15°C to +100°C (coil class F) -15°C to +120°C (coil class H)
- Oxygen service, FPM disc and seals, see "15-DIGIT PRODUCT CODE"
- Connector with visual indication and peak voltage suppression or with cable length of 2 m
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (See page: 19)

(\*) 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.



NC function



NO function

**Specifications**

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)						power coil (W)		thread type	dimensions / type <sup>(1)</sup>	15-DIGIT PRODUCT CODE									
				max. (PS)										brass	stainless steel	voltage code							
				air (*)		water (*)		oil (*)								24 V/50 Hz	48 V/50 Hz	115 V/50 Hz	230 V/50 Hz	24 V/DC	48 V/DC		
				min.	~	=	~	=	~					=	~							=	
(mm)	(m <sup>3</sup> /h)	(l/min)																					
<b>Without manual operator</b>																							
<b>NC - Normally closed, NBR seal and disc</b>																							
3/8	3,2	0,3	5	0	12	8	12	6,5	6	5	8,1	10,6	G*	01	E263K002S1N00	-							
					18	10	17	8	9,5	7	11,1	18,6	G*	01	E263K003S1N00	-							
					23	7,5	20	7	14	5	10,1	11,6	G*	02	E263K232S1N00	E263K190S1N00							
															NPT	02	-	8263K190S1N00					
					34	17	26	17	24	10	17,1	22,6	G*	02	E263K115S1N00	E263K191S1N00							
															NPT	02	-	8263K191S1N00					
	4	0,45	7,5	0	14	3,5	12	3,5	6,5	3	10,1	11,6	G*	02	E263K200S1N00	E263K331S1N00							
															NPT	02	-	8263K331S1N00					
					20	7,5	14	7,5	13	6	17,1	22,6	G*	02	E263K118S1N00	E263K193S1N00							
															NPT	02	-	8263K193S1N00					
					3,5	2	3,5	2	2	1,9	8,1	10,6	G*	01	E263K119S1N00	-							
															NPT	02	-	-					
5,6	0,63	10,5	0	6,5	2	5,5	2	4,5	2	10,1	11,6	G*	02	E263K124S1N00	E263K195S1N00								
														NPT	02	-	8263K195S1N00						
				8,5	4	6,5	4	6,5	4	17,1	22,6	G*	02	E263K206S1N00	E263K332S1N00								
														NPT	02	-	8263K332S1N00						
				2	1,6	2	1,5	1,4	1,3	8,1	10,6	G*	01	E263K054S1N00	-								
														NPT	02	-	-						
7,1	0,76	12,7	0	4	-	4	-	3	-	10,1	-	G*	02	E263K125S1N00	E263K197S1N00								
														NPT	02	-	8263K197S1N00						
				6,5	3	5,5	3	4,5	3	17,1	22,6	G*	02	E263K210S1N00	E263K333S1N00								
														NPT	02	-	8263K333S1N00						
				11	6,5	10	6,5	8,5	4,5	10,1	11,6	G*	02	E263K070S1N00	E263K080S1N00								
														NPT	02	-	8263K080S1N00						
3/8	3,2	0,3	5	0	14	9	13	7,5	12	6,5	17,1	22,6	G*	02	E263K100S1N00	E263K104S1N00							
															NPT	02	-	8263K104S1N00					
					6	4	6	3,5	4,5	3	10,1	11,6	G*	02	E263K071S1N00	E263K081S1N00							
															NPT	02	-	8263K081S1N00					
					8	5	7,5	4	7	3,5	17,1	22,6	G*	02	E263K101S1N00	E263K105S1N00							
															NPT	02	-	8263K105S1N00					
	5,6	0,72	12	0	3	2	3	1,7	2,5	1,7	10,1	11,6	G*	02	E263K072S1N00	E263K082S1N00							
															NPT	02	-	8263K082S1N00					
					4	2	3,5	2	3,5	2,1	17,1	22,6	G*	02	E263K102S1N00	E263K106S1N00							
															NPT	02	-	8263K106S1N00					
					2	1,3	2	1,1	2	1,1	10,1	11,6	G*	02	E263K073S1N00	E263K083S1N00							
															NPT	02	-	8263K083S1N00					
7,1	0,83	13,8	0	2,5	1,3	2,5	1,1	2,5	1,1	17,1	22,6	G*	02	E263K103S1N00	E263K107S1N00								
														NPT	02	-	8263K107S1N00						
				11	6,5	10	6,5	8,5	4,5	10,1	11,6	G*	02	E263K070S1N00	E263K080S1N00								
														NPT	02	-	8263K080S1N00						
				14	9	13	7,5	12	6,5	17,1	22,6	G*	02	E263K100S1N00	E263K104S1N00								
														NPT	02	-	8263K104S1N00						
<b>With maintained manual operator</b>																							
<b>NC - Normally closed, NBR seal and disc</b>																							
3/8	3,2	0,3	5	0	23	7,5	20	7	14	5	10,1	11,6	G*	02	E263K232S1N01	E263K190S1N01							
															NPT	02	-	8263K190S1N01					
					34	17	26	17	24	10	17,1	22,6	G*	02	E263K115S1N01	E263K191S1N01							
															NPT	02	-	8263K191S1N01					
					14	3,5	12	3,5	6,5	3	10,1	11,6	G*	02	E263K200S1N01	E263K331S1N01							
															NPT	02	-	8263K331S1N01					
	4	0,45	7,5	0	20	7,5	14	7,5	13	6	17,1	22,6	G*	02	E263K118S1N01	E263K193S1N01							
															NPT	02	-	8263K193S1N01					
					6,5	2	5,5	2	4,5	2	10,1	11,6	G*	02	E263K124S1N01	E263K195S1N01							
															NPT	02	-	8263K195S1N01					
					8,5	4	6,5	4	6,5	4	17,1	22,6	G*	02	E263K206S1N01	E263K332S1N01							
															NPT	02	-	8263K332S1N01					
7,1	0,76	12,7	0	4	-	4	-	3	-	10,1	-	G*	02	E263K125S1N01	E263K197S1N01								
														NPT	02	-	8263K197S1N01						
				6,5	3	5,5	3	4,5	3	17,1	22,6	G*	02	E263K210S1N01	E263K333S1N01								
														NPT	02	-	8263K333S1N01						
				11	6,5	10	6,5	8,5	4,5	10,1	11,6	G*	02	E263K070S1N01	E263K080S1N01								
														NPT	02	-	8263K080S1N01						

<sup>(1)</sup>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 263 K 002 S1 N00 H1

**Thread connection**

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

**Product series**

263

**Revision letter**

K = Initial release

**Valves version**

**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)<sup>(2)</sup>
- FT** = 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)<sup>(2)</sup>
- 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)<sup>(2)</sup>
- FU** = 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)<sup>(2)</sup>
- MV** = Steel enclosure, M20 cable gland, IECEx/ATEX  
II 2G Ex eb mb IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to EM prefix)<sup>(2)</sup>
- MT** = Steel enclosure, 20 mm conduit, IECEx/ATEX  
II 2G Ex eb mb IIC Gb / II 2D 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 eb mb IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to EMT prefix)<sup>(2)</sup>
- MW** = AISI 316 enclosure, M20 cable gland, IECEx/ATEX  
II 2G Ex eb mb IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to WSEM prefix)<sup>(2)</sup>
- MU** = AISI 316 enclosure, 20 mm conduit, IECEx/ATEX  
II 2G Ex eb mb IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to WSEMET prefix)<sup>(2)</sup>
- MS** = AISI 316 enclosure, 1/2 NPT conduit, IECEx/ATEX  
II 2G Ex eb mb IIC Gb / II 2D Ex tb IIIC Db, zone 1-21 (equivalent to WSEMT prefix)<sup>(2)</sup>
- 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)<sup>(2)</sup>
- 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)<sup>(2)(3)</sup>

**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
- HL** = 24 V / 50 Hz - class H
- HR** = 48 V / 50 Hz - class H
- HT** = 115 V / 50 Hz - class H
- H8** = 230 V / 50 Hz - class H
- H1** = 24 V DC - class H
- H9** = 48 V DC - class H

**Options**

**Without manual operator**

- N00** = NBR disc and seals
- V00** = FPM disc and seals
- VN0** = FPM disc and seals for Oxygen service
- E00** = EPDM disc and seals
- J00** = CR disc and seals
- T00** = PTFE disc and seals <sup>(1)</sup>

**With maintained manual operator**

- N01** = NBR disc and seals
- V01** = FPM disc and seals
- VN1** = FPM disc and seals for Oxygen service
- E01** = EPDM disc and seals
- J01** = CR disc and seals

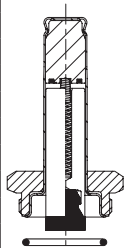
<sup>(1)</sup> Max. operating pressure limited to 75% of standard value.

<sup>(2)</sup> Search prefix in Emerson.com/asco to get detailed technical information.

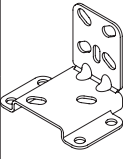
Please note that the valve pressure ratings with some of the ATEX enclosures will be reduced.

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	FPM (oxygen)	EPDM	CR	PTFE	NBR	FPM	FPM (oxygen)	EPDM	CR	PTFE		
	E263K002	M200001	N00	V00	VN0	E00	J00	T00	M200005	N00	V00	VN0	E00	J00	T00
	E263K003	M200001	N00	V00	VN0	E00	J00	T00	M200006	N00	V00	VN0	E00	J00	T00
	E263K054	M200020	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00
	E263K070	M200016	N00	V00	VN0	E00	J00	T00	M200032	N00	V00	VN0	E00	J00	T00
	E263K071	M200017	N00	V00	VN0	E00	J00	T00	M200033	N00	V00	VN0	E00	J00	T00
	E263K072	M200018	N00	V00	VN0	E00	J00	T00	M200034	N00	V00	VN0	E00	J00	T00
	E263K073	M200019	N00	V00	VN0	E00	J00	T00	M200035	N00	V00	VN0	E00	J00	T00
	E263K080/081/082/083	M200018	N00	V00	VN0	E00	J00	T00	M200034	N00	V00	VN0	E00	J00	T00
	E263K100/101/102/103	M200022	N00	V00	VN0	E00	J00	T00	M200038	N00	V00	VN0	E00	J00	T00
	E263K104/105/106/107	M200040	N00	V00	VN0	E00	J00	T00	M200040	N00	V00	VN0	E00	J00	T00
	E263K115/118	M200007	N00	V00	VN0	E00	J00	T00	M200007	N00	V00	VN0	E00	J00	T00
	E263K119	M200001	N00	V00	VN0	E00	J00	T00	M200007	N00	V00	VN0	E00	J00	T00
	E263K124/125	M200007	N00	V00	VN0	E00	J00	T00	M200007	N00	V00	VN0	E00	J00	T00
	E263K190/191/193	M200008	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00
	E263K195/197	M200008	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00
	E263K197	M200008	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00
	E263K200/206/210/232	M200007	N00	V00	VN0	E00	J00	T00	M200007	N00	V00	VN0	E00	J00	T00
	E263K331/332/333	M200008	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00
	8263K080/081/082/083	M200018	N00	V00	VN0	E00	J00	T00	M200034	N00	V00	VN0	E00	J00	T00
	8263K104/105/106/107	M200040	N00	V00	VN0	E00	J00	T00	M200040	N00	V00	VN0	E00	J00	T00
8263K190/191/193	M200008	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00	
8263K195/197	M200008	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00	
8263K331/332/333	M200008	N00	V00	VN0	E00	J00	T00	M200008	N00	V00	VN0	E00	J00	T00	

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

		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

## Dimensions (mm), Weight (kg)

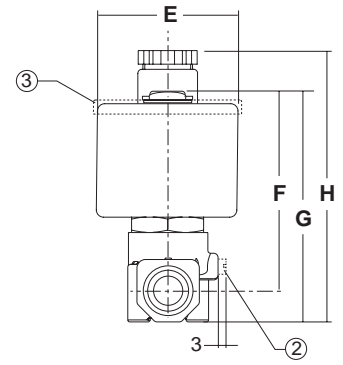
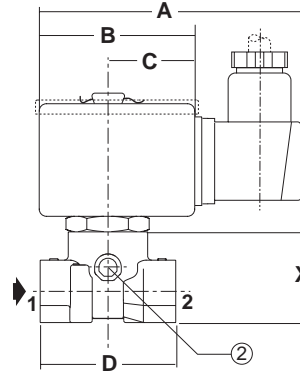
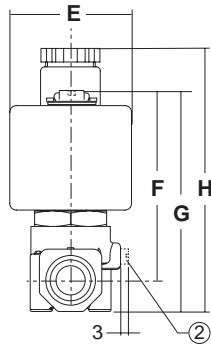
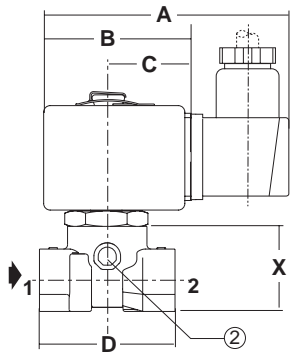
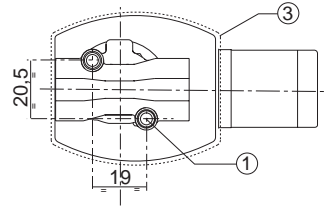
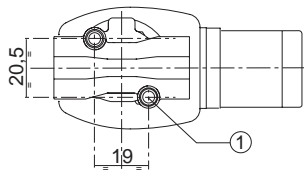


**TYPE 01**  
Electrical interface "S1"  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65



**TYPE 02**  
Electrical interface "S1"  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

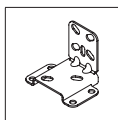
Configurator - CAD Files



type	A	B	C	D	E	F	G	H	X	weight <sup>(1)</sup>
01 (NC)	91	51	30	48	43	65	76	104	32	0,5
02 (NC)	95	57	33	48	50	69	80	107	32	0,63
02 (NO)	96	59	34	48	52	69	80	107	32	0,65

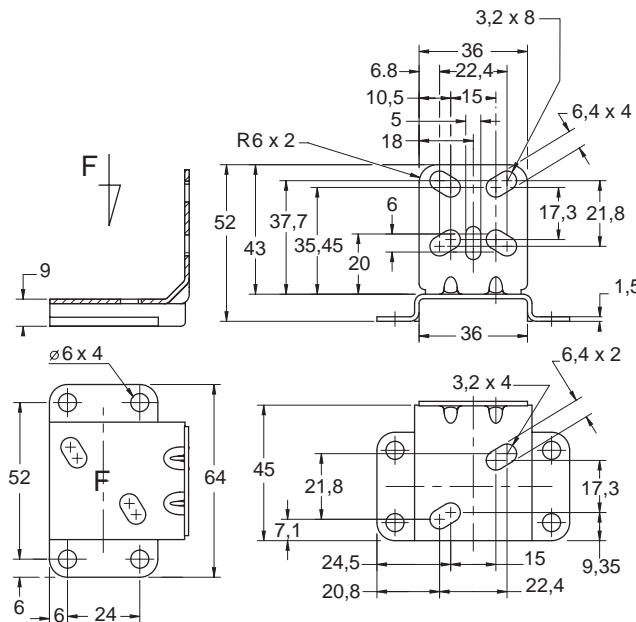
- ① 2 mounting holes M5 dia., depth 6 mm.
- ② Manual operator location.
- ③ NO version only.

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



**Mounting bracket**  
Steel or stainless steel

M200094A00 / M200095A00



A.P.O. - ELMOS v.o.s., Pražská 90, 509 01 Nová Paka, Tel.: +420 493 504 261, E-mail: apo@apoelmos.cz, Internet: [www.apoelmos.cz](http://www.apoelmos.cz)