

ASCO™ Solenoid Valves

For Cryogenic Service

Direct Operated, 1/8, 1/4 and 3/8 Tapped

2/2 NC

Series

262-263

Features

- The solenoid valves will withstand the severe service encountered in controlling cryogenic fluids, such as liquid oxygen (-183°C), liquid argon (-186°C) and liquid nitrogen (-196°C)
- All valves are degreased, cleaned, tested and packed to keep them free from moisture. In addition liquid oxygen (LOX) valves are "black light" tested to check for any hydrocarbons
- Valves do not require a minimum operating pressure
- 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 (mm²/s)

Response time

5 - 25 ms

fluids (*)	temperature range (TS)	seal materials (*)
cryogenic fluids	-196°C to +60°C	PTFE

Materials in contact with fluid

(*) Ensure that the compatibility of the fluids in contact with the materials 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	Lead-clad copper
Disc	PTFE

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

Moulded IP65 (EN 60529)

Standard voltages

DC (=) : 24V - 48V

(Other voltages and 60 Hz on request)

AC (~) : 24V - 48V - 115V - 230V/50 Hz

operator ambient temperature range (TS)	power ratings			replacement coil ⁽¹⁾	
	inrush ~	holding ~	hot/cold =	~	=
(°C)	(VA)	(VA)	(W)		
-40 to +55	50	25	10,1	8,5/11,6	238613-059
	70	40	17,1	15,1/22,6	238613-159
					238913-006
					238913-106

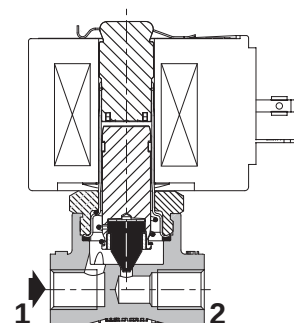
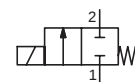
⁽¹⁾ All 238 basic numbers are UL & CSA approved and marked with the UR (recognised component) & CSA logos.

Options

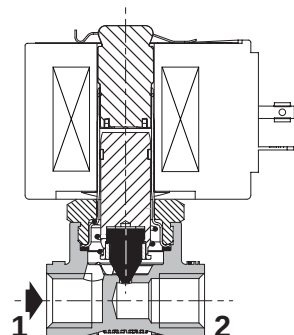
- Seals and disc (*) ⁽²⁾ PTFE: -196°C to +66°C (coil class F / AC Voltage)
-196°C to +49°C (coil class H / DC Voltage)
- Connector with visual indication and peak voltage suppression or with cable length of 2 m

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

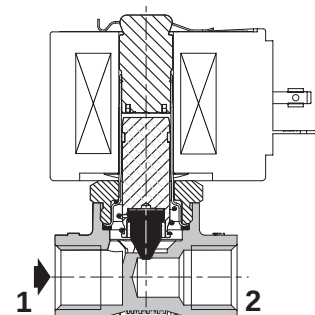
⁽²⁾ The minimum ambient temperature of the solenoid valve is determined by the limitations of minimum temperature indicated.



NC function (263 - 1/8)



NC function (262 - 1/4)



NC function (263 - 3/8)

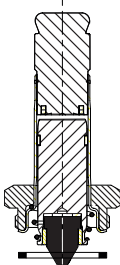
Specifications

Specifications											15-DIGIT PRODUCT CODE							
pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)			power coil (W)		thread type	dimensions / type ⁽¹⁾	brass		voltage code					
													24 V/50 Hz	48 V/50 Hz	115 V/50 Hz	230 V/50 Hz	24 V/DC	48 V/DC
				min.	max. (PS)								~	=				
	cryogenic fluids (*)																	
(mm)	(m³/h)	(l/min)																
Without manual operator																		
NC - Normally closed																		
1/8	3,2	0,3	5	0	10,7	5,2	10,1	11,6	G	01	G263K240S1TD0							
1/4	3,2	0,3	5	0	10,7	5,2	10,1	11,6	G*	01	E262K232S1TD0							
	5,6	0,63	10,5	0	6,9	2,9	17,1	22,6	G*	01	E262K114S1TD0							
	7,1	0,76	12,7	0	4	1,9	17,1	22,6	G*	01	E262K212S1TD0	FL	FR	FT	F8	H1	H9	
3/8	3,2	0,3	5	0	10,7	5,2	10,1	11,6	G*	02	E263K232S1TD0							
	5,6	0,63	10,5	0	6,2	2,9	17,1	22,6	G*	02	E263K206S1TD0							
	7,1	0,76	12,7	0	4	1,9	17,1	22,6	G*	02	E263K210S1TD0							

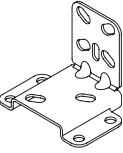
(1) For dimensions, see drawing(s) for each construction type on the following page(s).

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

											15-DIGIT PRODUCT CODE						Configurator - CAD Files	
											-	---	K	---	S1	TD0	--	
Thread connection																	Voltage - class	
G = ISO 228/1 (1/8)																	FL = 24 V / 50 Hz - class F	
E = ISO 228/1 & ISO 7/1 (combination thread, G*)																	FR = 48 V / 50 Hz - class F	
8 = NPT (SAE 71051) [contact us]																	FT = 115 V / 50 Hz - class F	
																	F8 = 230 V / 50 Hz - class F	
Product series																	H1 = 24 V DC - class H	
262 (1/4)																	H9 = 48 V DC - class H	
263 (1/8 - 3/8)																		
Revision letter																	Options	
K = Initial release																	Without manual operator	
																	TD0 = PTFE disc and seals	
Valves version																	Electrical interface	
																	S1 = With spade plug connector	

Spare parts kits no. (*)					
		AC (~)		DC (=)	
			PTFE		PTFE
	G263K240	M200056	TD0	M200057	TD0
	E262K232				
	E262K114				
	E262K212				
	E263K232				
	E263K206				
	E263K210				

ASCO™ Solenoid Valves

		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” applicable for 1/4, 3/8 have standard thread according to ISO 228/1 and ISO 7/1. Thread connection “G” applicable for 1/8, have standard thread according to ISO 228/1
- Thread connection “8” have standard thread = NPT (SAE 71051)
- Installation/maintenance instructions are included with each valve

Dimensions (mm), Weight (kg)

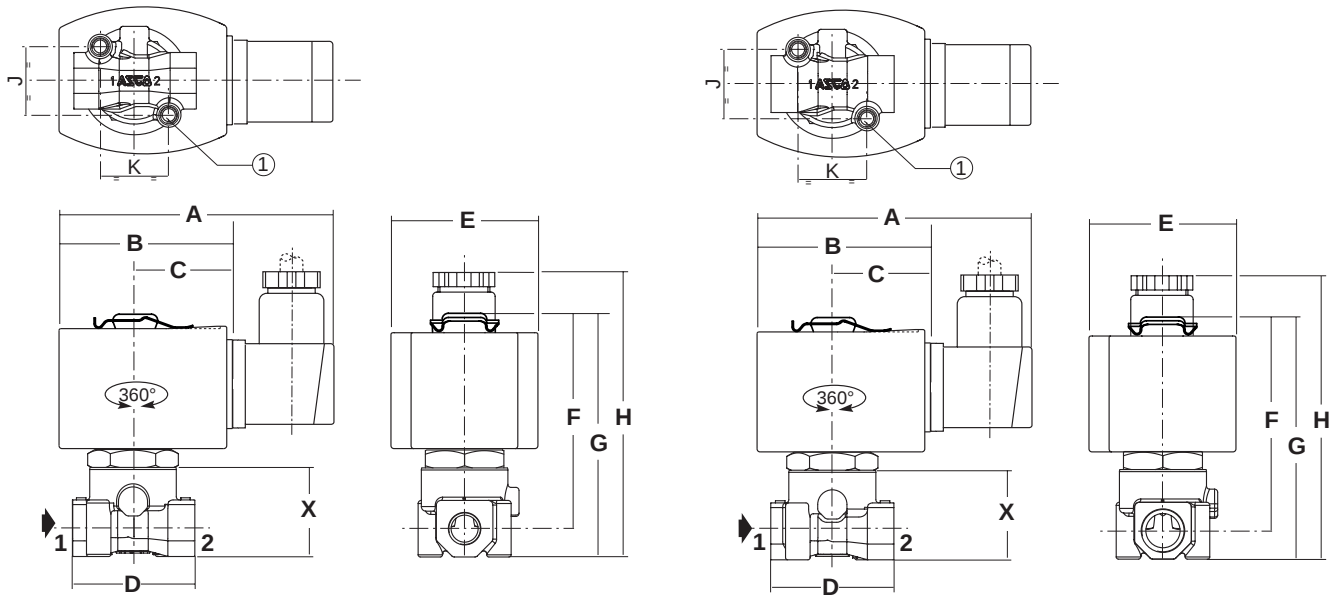
Configurator - CAD Files



TYPE 01
Electrical interface “S1”
Epoxy moulded
IEC 335 / ISO 4400
IP65

1/8 power coil 10,1 W / 11,6 W

1/4 power coil 10,1 W / 11,6 W - 17,1 W / 22,6 W



type	pipe size	A	B	C	D	E	F	G	H	X	weight ⁽¹⁾
01	1/8	95	57	33	40	50	69	78	93	29	0,54
	1/4	95	57	33	40	50	69	78	93	29	0,58

① 2 mounting holes:
M5 dia., depth 7,5 mm (1/8-1/4)

⁽¹⁾ Incl. coil(s) and connector(s).

Dimensions (mm), Weight (kg)



TYPE 02

Electrical interface “S1”

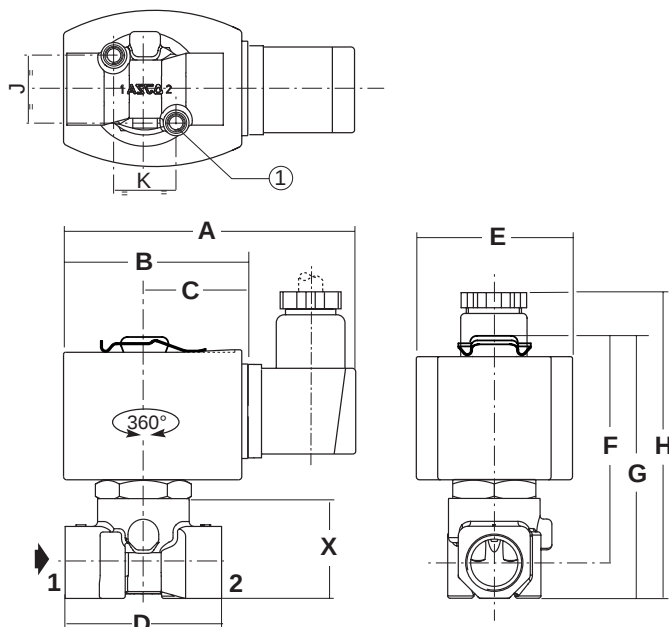
Electrical interface
Epoxy moulded

IEC 335 / ISO 4400

IP65

3/8 power coil 10,1 W / 11,6 W - 17,1 W / 22,6 W

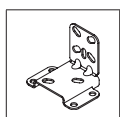
Configurator - CAD Files



type	pipe size	A	B	C	D	E	F	G	H	X	weight ⁽¹⁾
02	3/8	95	59	34	48	50	69	80	95	31	0.61

(1) Incl. coil(s) and connector(s).

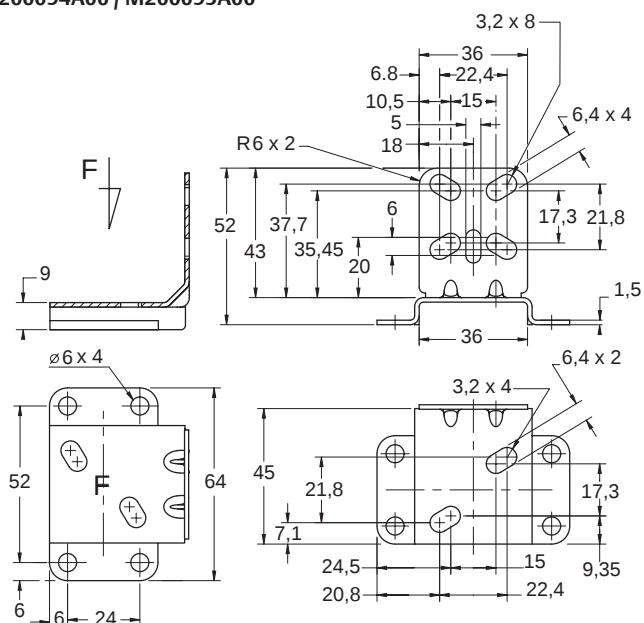
① 2 mounting holes:
M5 dia., depth 6 mm (3/8)



Mounting bracket

Mounting brackets
Steel or stainless steel

M200094A00 / M200095A00



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