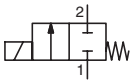
SOLENOID VALVES

direct operated
for cryogenic service
1/8 - 1/4 - 3/8

NC 

2/2
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

GENERAL

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

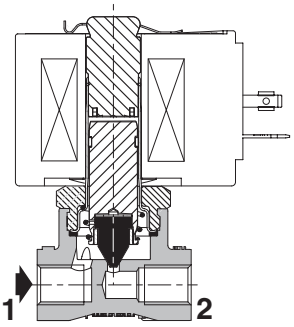
operator ambient temperature range (TS)	power ratings				replacement coil (1)	
	inrush ~	holding ~		hot/cold =	~	=
(°C)	(VA)	(VA)	(W)	(W)	230 V/50 Hz	24 V DC
-40 to +55	50	25	10,1	8,5/11,6	238613-059	238913-006
	70	40	17,1	15,1/22,6	238613-159	238913-106

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

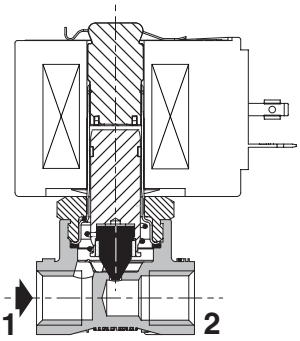
OPTIONS

Seals and disc (∗) (2) (fluid temperature range)	PTFE: -196°C to +66°C (coil class F) -196°C to +49°C (coil class H)
Connector with visual indication and peak voltage suppression or with cable length of 2 m (www.asco.com)	

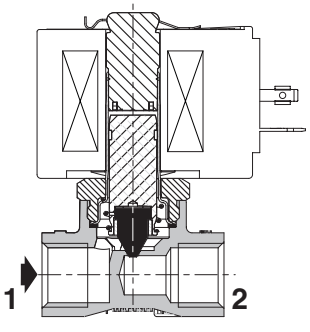
(∗) **Ensure that the compatibility of the fluids in contact with the materials is verified.**
(2) The minimum ambient temperature of the solenoid valve is determined by the limitations of minimum temperature indicated.



NC function (263 - 1/8)



NC function (262 - 1/4)



NC function (263 - 3/8)

SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar) min.	operating pressure differential (bar) max. (PS) cryogenic fluids (∗) ~	operating pressure differential (bar) max. (PS) cryogenic fluids (∗) =	power coil (W) ~	power coil (W) =	thread type	dimensions / type (1)	15-DIGIT PRODUCT CODE 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
	(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**	FL	FR	FT	F8	H1	H9
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**						
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.

Configurator - CAD Files

15-DIGIT PRODUCT CODE

- **---** **K** **---** **S1** **TD0** **--**

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

Product series
262 (1/4)
263 (1/8 - 3/8)

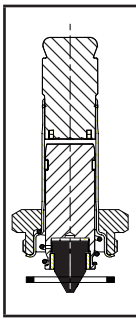
Revision letter
K = Initial release

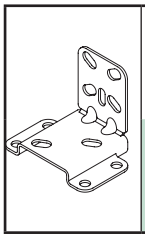
Valves version

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
TD0 = PTFE disc and seals

Electrical interface
S1 = With spade plug connector

	SPARE PARTS KITS CODE (∗)			
	AC (~)		DC (=)	
		PTFE		PTFE
	G263K240 E262K232 E262K114 E262K212 E263K232 E263K206 E263K210	**M200056**	**TD0**	**M200057**	**TD0**

		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

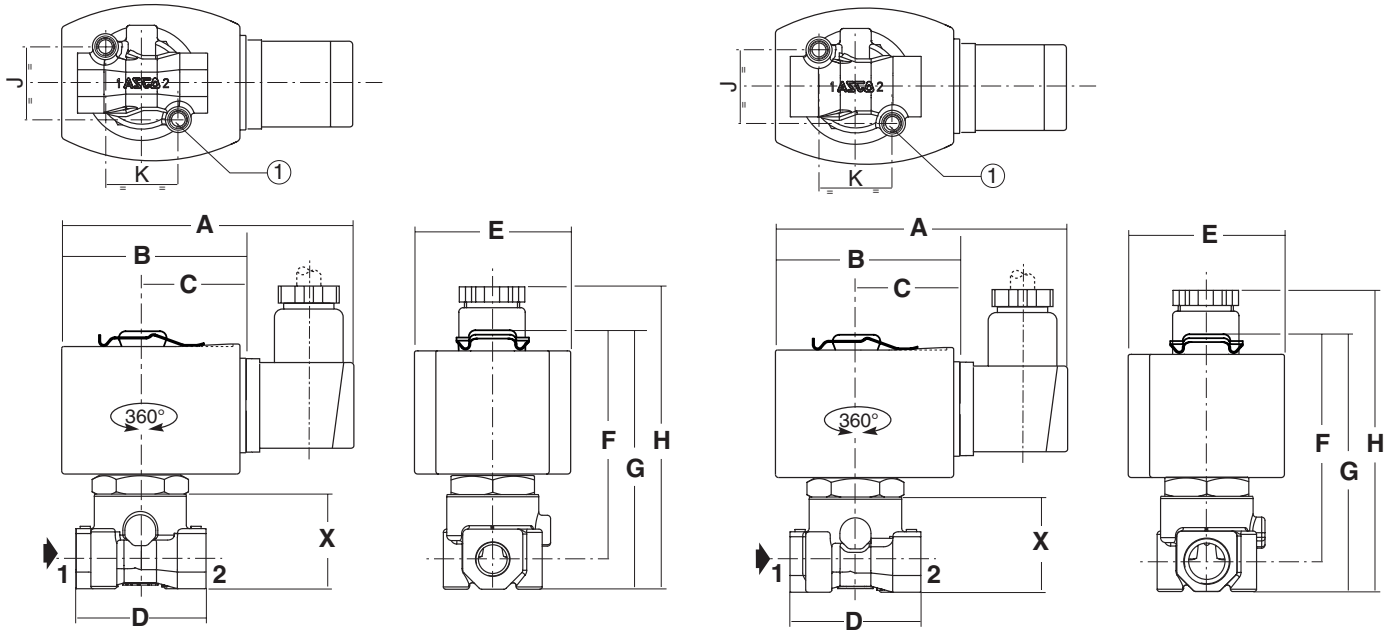
DIMENSIONS (mm), WEIGHT (kg)

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

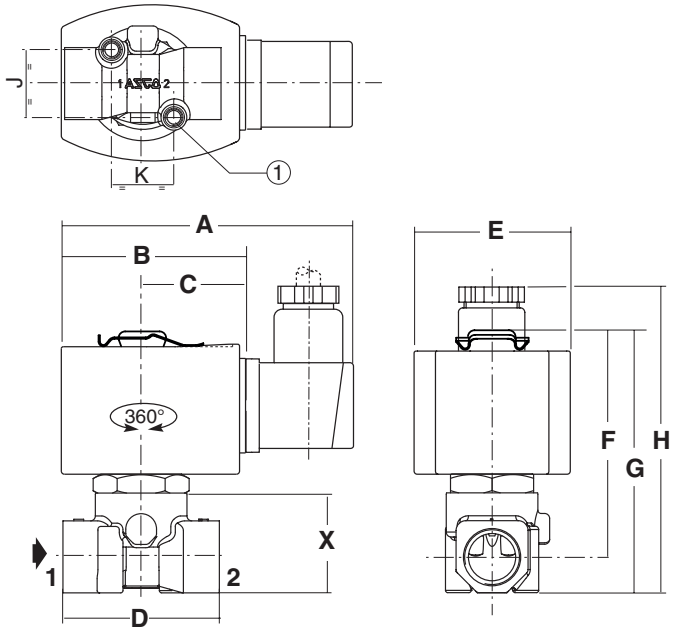
(1) Incl. coil(s) and connector(s).

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

TYPE 02

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

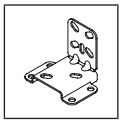
3/8 power coil 10,1 W / 11,6 W - 17,1 W / 22,6 W



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

Steel or stainless steel

M200094A00 / M200095A00