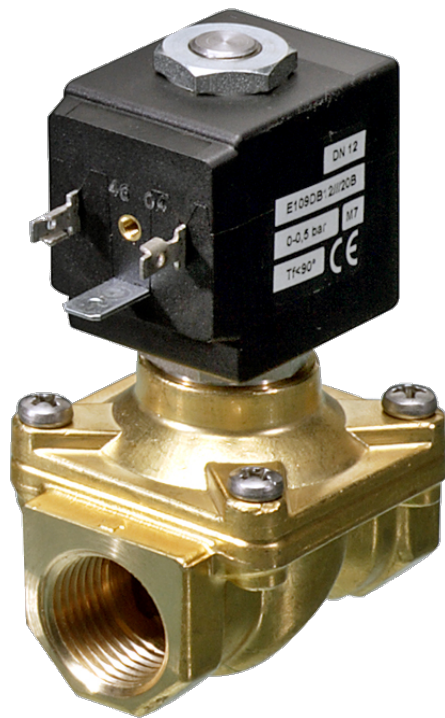


# 108 Series Valves



800.909.4988  
info@rankinusa.com

**RANKIN**   
COMPONENTS THAT AUTOMATE

**DESCRIPTION**

Solenoid valve 2 way normally closed with assisted-lift diaphragm

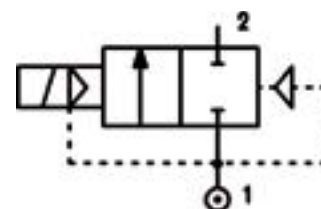
**CONSTRUCTION**

Body and cover	Brass
Armature tube	AISI 303
Plunger and core	AISI 430FR
Springs	AISI 302
Seal material	FPM



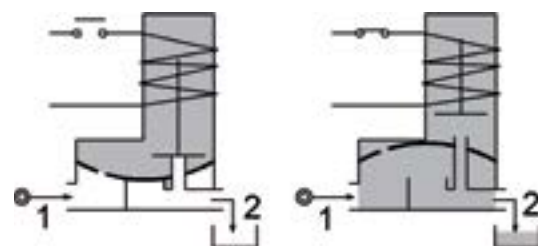
**FEATURES**

Maximum fluid viscosity 25cSt (mm<sup>2</sup>/s)  
 Ambient temperature: from +14°F to +176°F according to the coil  
 Preferred mounting position with vertical coil above  
 For complete diaphragm opening, a differential pressure of at least 2.2psi (0.15bar) is necessary



4

**OPTIONS:** Electroless nickel plating



CODE	Port Size	Orifice Size		Flow Factor Cv	Operating Pressure Differential (M.O.P.D.) ②						Nominal power			Coil		Seal	Temp. range (°F)
					Min		Max				AC (VA)		DC (W)	Series	Width (mm)		
					(psi)	(bar)	AC	DC	Inrush	Holding							
E108CNV12///...	3/8	0.472	12	2.31	0	0	145	10	-	-	20	15	-	2	30	FPM=V	+14 +284
E108DNV12///...	1/2	0.472	12	2.54	0	0	145	10	-	-	40	30	27	5	36		
E108CNV12///...	3/8	0.472	12	2.31	0	0	174	12	145	10	40	30	27				
E108DNV12///...	1/2	0.472	12	2.54	0	0	174	12	145	10				-	-		
E108ENV18///...	3/4	0.709	18	5.2	0	0	130	9	-	-	-	-	27				
E108FNV25///...	1	0.984	25	9.82	0	0	101	7	-	-							
D108ENV18///...	3/4	0.709	18	5.2	0	0	-	-	130	9							
D108FNV25///...	1	0.984	25	9.82	0	0	-	-	116	8							

Ordination example: E108FV25///521 FPM seal, connection 1 NPT

① Coil

Coil 24V DC marked **CE**

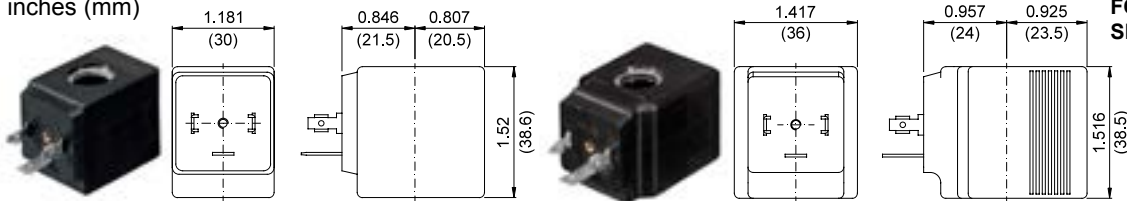
② Safe Working Pressure:362 psi. Is the line or system pressure to which the valve may be subjected without being damaged.

COILS Code ①	Alternating Current 60Hz						Direct Current				Electrical connection	Connectors	DESCRIPTION Insulation class F or H Voltage tolerance ±10% Protection class: IP65 with connector attached IP00 without connector Continuous service ED100%
	24V		120V		240V		12V		24V				
Series 2 Width 30mm	U25B c  us	20B	U25D c  us	20D	U25F c  us	20F	-	-	-	-	DIN 43650A	PG9 code 10349000	
Series 5 Width 36mm	-	52B	-	52D	-	52F	-	520	-	521	DIN 43650A	PG11 code 10349001	

**OPTIONS**  
Cable attached  
Special coil voltage  
Special coil powers

### OVERALL DIMENSIONS

inches (mm)



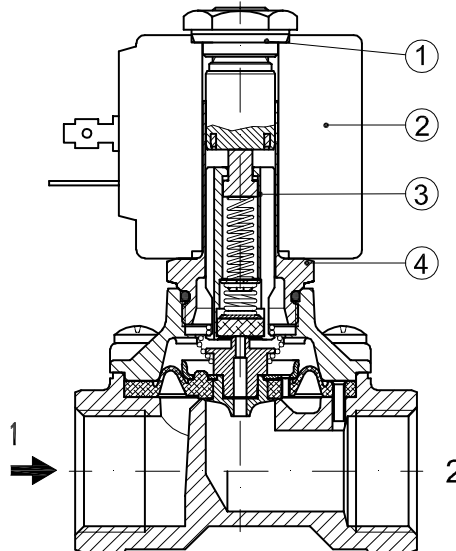
Series 2 Weight 0.26lb (0.12Kg)

Series 5 Weight 0.44lb (0.20Kg)

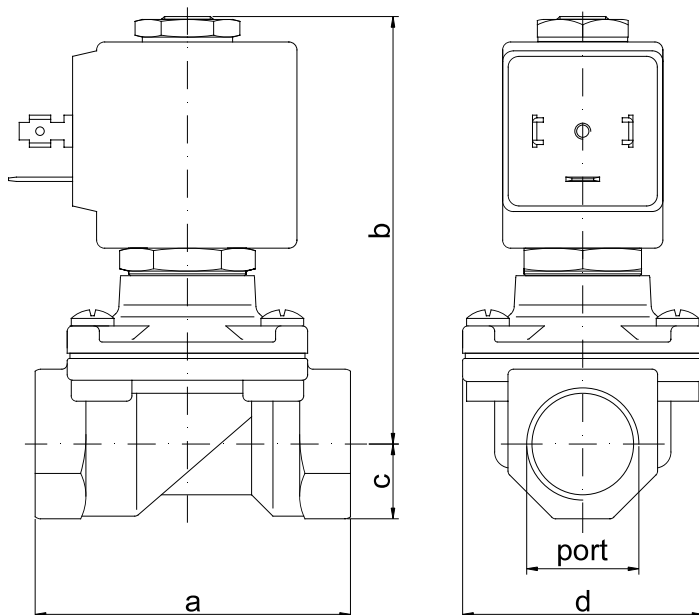
**FOR COIL SPECIFICATION SEE SECTION 6**

### SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core



### OVERALL DIMENSION



PORT SIZE	a		b		c		d		weight (coil series 2)		weight (coil series 5)	
	in	mm	in	mm	in	mm	in	mm	lb	Kg	lb	Kg
3/8	2.32	59	3.27	83	0.55	14	1.77	45	1.15	0.52	1.32	0.60
1/2	2.32	59	3.27	83	0.55	14	1.77	45	1.08	0.49	1.26	0.57
3/4	3.11	79	3.54	90	0.71	18	2.17	55	-	-	1.79	0.81
1	3.78	96	3.98	101	0.79	20	2.83	72	-	-	2.69	1.22