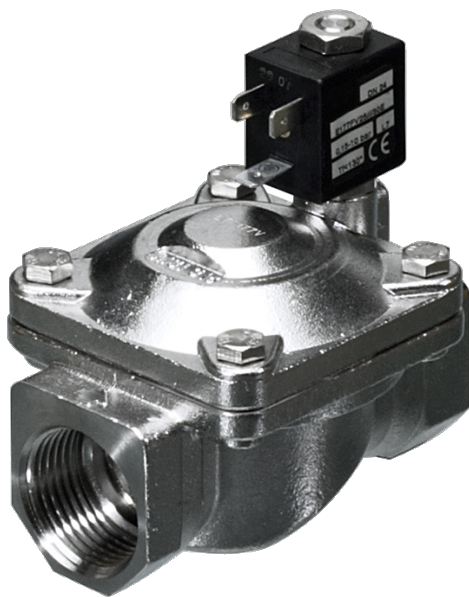


# 177 Series Valves



800.909.4988  
info@rankinusa.com

**RANKIN**   
COMPONENTS THAT AUTOMATE

## DESCRIPTION

Solenoid valve 2 way normally closed in stainless steel AISI 316 with servo-assisted diaphragm

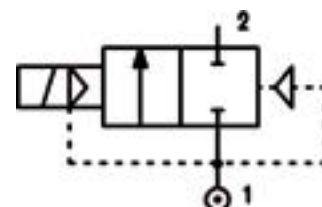
## CONSTRUCTION

Body and cover	AISI 316
Armature tube	AISI 316
Plunger and core	AISI 430FR
Springs	AISI 302
Seal material	NBR - FPM - EPDM



## FEATURES

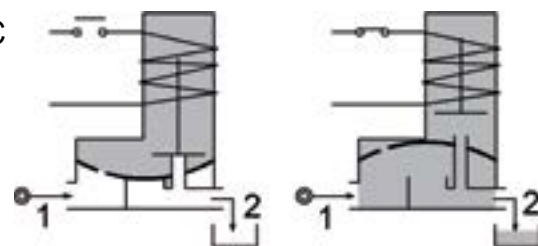
- Minimum differential pressure 2.2psi
- Maximum fluid viscosity 25cSt (mm<sup>2</sup>/s)
- Ambient temperature: from +14°F to +176°F according to the coil
- Preferred mounting position with vertical coil above



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## OPTIONS:

- Manual override
- Series 7 explosion proof coil according to
  - Ⓜ ATEX II 2G Ex mb IIC T6, T5, T4 Gb
  - II 2D Ex mb IIIC T85°C, T100°C, T135°C
  - similar to NEC 505 Div.1 Class II IIC T6
- Food approval seal material
- Version with slow closing diaphragm
- Version for use with oxygen
- Silver shading ring



CODE	Port Size	Orifice Size		Flow Factor Cv	Operating Pressure Differential (M.O.P.D.) ③				Nominal power			Coil		Seal	Temp. range		
		Min	Max		Inrush	Holding	DC	Series	Width								
①	②	NPT	(in)	(mm)						(gpm)	(psi)	(bar)	AC	(psi)	(bar)	(psi)	(bar)
E177CN...12///...	3/8	0.472	12	2.54	2.2	0.15	217	15	217	15	12	8	6.5	3	22	NBR=B	+14 +194
E177DN...12///...	1/2	0.472	12	2.89	2.2	0.15	217	15	217	15						EPDM=E	+14 +284
E177EN...18///...	3/4	0.709	18	6.36	2.2	0.15	188	13	188	13						FPM=V	+14 +284
E177FN...25///...	1	0.984	25	11.79	2.2	0.15	145	10	145	10							

① Seal Ordination example: E177DNB12///U35D NBR seal, connection 1/2 NPT  
 ② Coil Coil 120V 60Hz certified c us and marked C E

③ Safe Working Pressure:360 psi. Is the line or system pressure to which the valve may be subjected without being damaged. The maximum allowable pressure PS for steam is 36 psi.

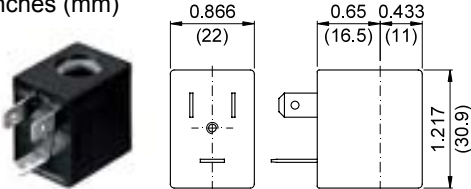
# Series 177

COILS Code ②	Alternating Current						Direct Current				Electrical connection	Connectors
	24V		120V		240V		12V		24V			
Series 3 Width 22mm	U35B c  US	30B	U35D c  US	30D	U35F c  US	30F	U350 c  US	300	U351 c  US	301	DIN 46244	PG9 code 10348000

**DESCRIPTION**  
 Class F or H insulation  
 Voltage tolerance  $\pm 10\%$   
 Protection class:  
 IP65 with connector attached  
 IP00 without connector  
 Continuous service ED100%

## OVERALL DIMENSIONS

inches (mm)



Series 3 Weight 0.11lb (0.05Kg)

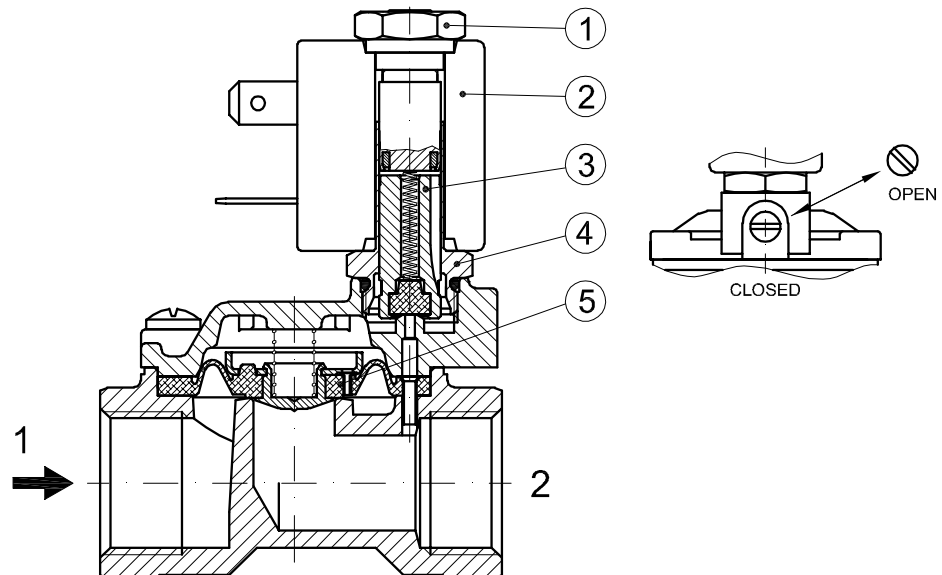
## OPTIONS

Cable attached  
 Special coil voltage  
 Special coil powers

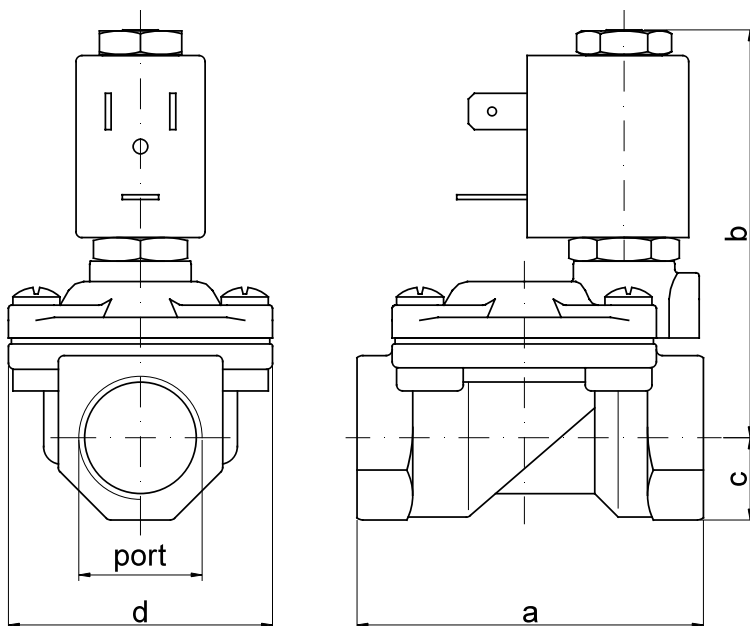
**FOR COIL SPECIFICATION SEE SECTION 6**

## SPARE PARTS LIST

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



## OVERALL DIMENSION



PORT SIZE	a		b		c		d		weight	
	in	mm	in	mm	in	mm	in	mm	lb	Kg
3/8	2.32	59	2.76	70	0.43	11	1.77	45	0.70	0.32
1/2	2.32	59	2.76	70	0.51	13	1.77	45	0.68	0.31
3/4	3.11	79	2.91	74	0.71	18	2.13	54	1.21	0.55
1	3.78	96	3.35	85	0.79	20	2.83	72	2.09	0.95