

# 170 Series Valves



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**RANKIN**   
COMPONENTS THAT AUTOMATE

## DESCRIPTION

Solenoid valve 2 way normally closed in stainless steel AISI 316 direct acting poppet type

## CONSTRUCTION

Body	AISI 316
Armature tube	AISI 316
Plunger and core	AISI 430FR
Shading ring	Silver
Springs	AISI 316
Seal material	NBR - FPM - EPDM - PTFE - FFKM (Kalrez)

## FEATURES

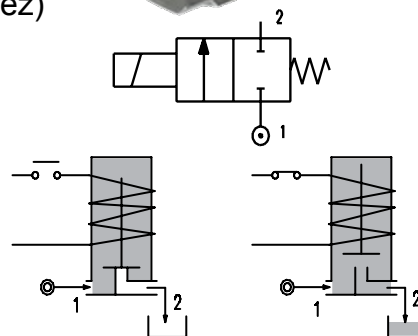
Maximum fluid viscosity 25cSt (mm<sup>2</sup>/s)  
 Ambient temperature: from +14°F to +176°F according to the coil  
 Universal mounting position

**OPTIONS:** Versions for use with industrial oxygen

**ON REQUEST:** Versions for use with fluid temperature at -40°C





**2**



CODE ① ② ③	Port Size NPT	Orifice Size		Flow Factor Cv	Operating Pressure Differential (M.O.P.D.) ⑤				Nominal power			Coil		Seal ②	Temp. range (°F)	
		(in)	(mm)		Min	Max		AC (VA)	DC (W)	Series	Width (mm)					
						psi	bar					psi	bar			
E170...N...10///...	1/4 3/8 1/2	0.039	1	0.046	0	1160	80	1160	80	20	15	10	2	30	NBR=B	+14 +194
E170...N...12///...		0.047	1.2	0.058	0	870	60	870	60							
E170...N...15///...		0.059	1.5	0.081	0	435	30	377	26							
E170...N...20///...		0.079	2	0.116	0	319	22	290	20							
E170...N...25///...		0.098	2.5	0.173	0	232	16	203	14							
E170...N...30///...		0.118	3	0.289	0	217	15	145	10							
E170...N...35///...		0.138	3.5	0.370	0	145	10	116	8							
E170...N...40///...		0.157	4	0.416	0	116	8	72	5							
E170...N...45///...		0.177	4.5	0.474	0	94	6.5	50	3.5							
E170...N...10///...		1/4 3/8 1/2	0.059	1	0.046	0	1450	100	1450							
E170...N...12///...	0.047		1.2	0.058	0	1160	80	1160	80							
E170...N...15///...	0.059		1.5	0.081	0	507	35	435	30							
E170...N...20///...	0.079		2	0.116	0	435	30	362	25							
E170...N...25///...	0.098		2.5	0.173	0	362	25	290	20							
E170...N...30///...	0.118		3	0.289	0	319	22	261	18							
E170...N...35///...	0.138		3.5	0.370	0	261	18	217	15							
E170...N...40///...	0.157		4	0.416	0	188	13	145	10							
E170...N...45///...	0.177		4.5	0.474	0	152	10.5	79	5.5							
E170...N...10///...	1/4 3/8 1/2		0.059	1	0.046	0	1450	100	1450	100	40	30	27	5	36	PTFE=W ④
E170...N...12///...		0.047	1.2	0.058	0	1450	100	1450	100							
E170...N...15///...		0.059	1.5	0.081	0	1160	80	1160	80							
E170...N...20///...		0.079	2	0.116	0	725	50	580	40							
E170...N...25///...		0.098	2.5	0.173	0	507	35	478	33							
E170...N...30///...		0.118	3	0.289	0	362	25	348	24							
E170...N...35///...		0.138	3.5	0.370	0	290	20	275	19							
E170...N...40///...		0.157	4	0.416	0	232	16	217	15							
E170...N...45///...		0.177	4.5	0.474	0	203	14	188	13							

① Port size: B=1/4 C=3/8 D=1/2

② Seal Ordination example: E170BNE35///U25B EPDM seal, connection 1/4 NPT

③ Coil Coil 24V 60Hz certified  and marked 

④ For PTFE seals the maximum allowable leakage is 0,0008gpm

⑤ Safe Working Pressure:1450 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 87 psi with PTFE seals and 36 psi with EPDM seals.

# Series 170

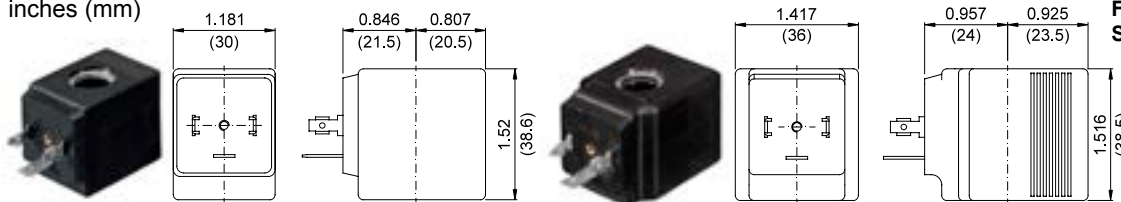
COILS Code ②	Alternating Current						Direct Current				Electrical connection	Connectors
	24V		120V		240V		12V		24V			
Series 2 Width 30mm	U25B c RA US	201	U25D c RA US	20D	U25F c RA US	20F	U250 c RA US	200	U251 c RA US	201	DIN 43650A	PG9 code 10349000
Series 5 Width 36mm	U55B c RA US	521	U55D c RA US	52D	U55F c RA US	52F	U550 c RA US	520	U551 c RA US	521	DIN 43650A	PG11 code 10349001

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

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

## OVERALL DIMENSIONS

inches (mm)



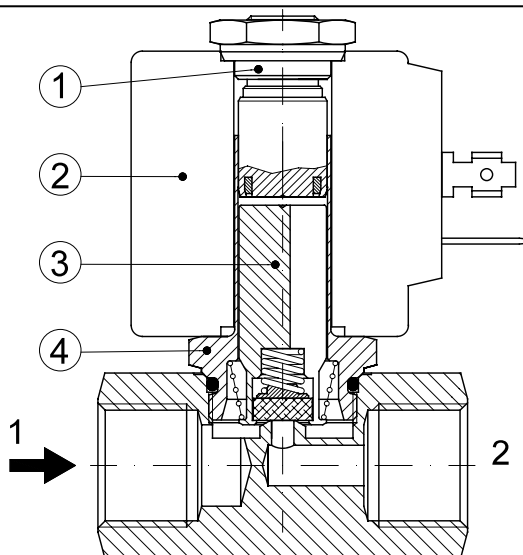
Series 2 Weight 0.26lb (0.12Kg)

Series 5 Weight 0.44lb (0.20Kg)

**FOR COIL SPECIFICATION SEE SECTION 6**

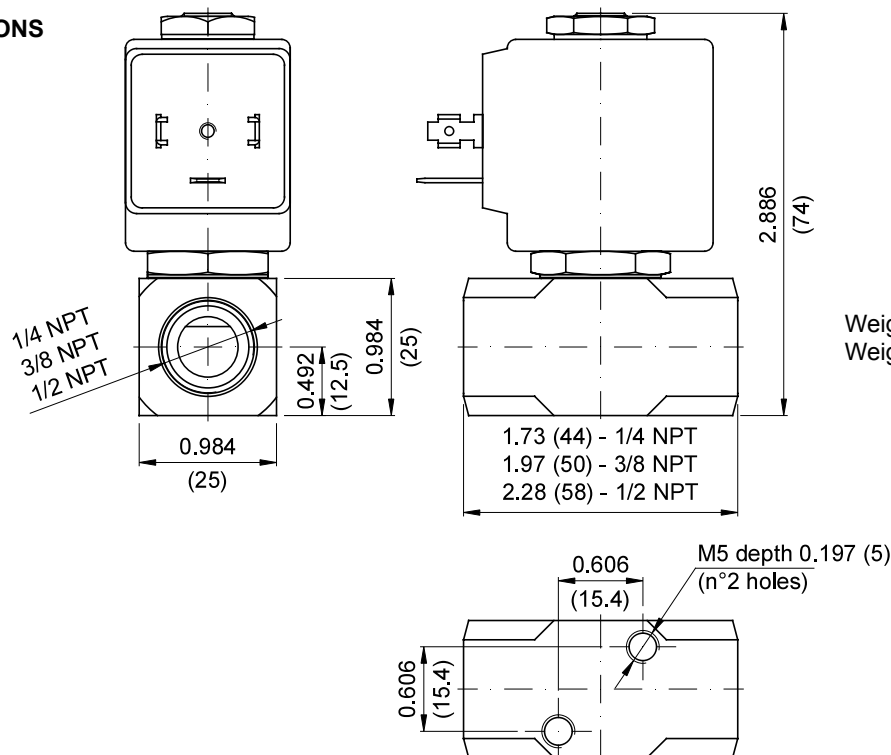
## SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube assembly



## OVERALL DIMENSIONS

inches (mm)



Weight with coil series 2=0.36Kg  
Weight with coil series 5=0.44Kg