

207 Series Valves



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RANKIN 
COMPONENTS THAT AUTOMATE

DESCRIPTION

Solenoid valve 2 way normally open with servo-assisted diaphragm

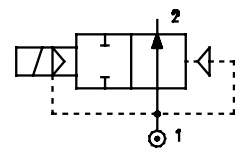
CONSTRUCTION

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



FEATURES

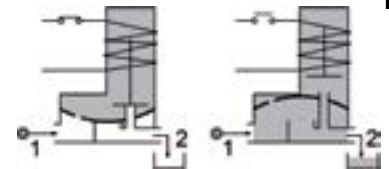
- Minimum differential pressure 2.2psi
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: from +14°F to +176°F according to the coil
- Preferred mounting position with vertical coil above



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OPTIONS:

- Electroless nickel plating
- 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 Db
 - similar to NEC 505 Div.1 Class II IIC T6



ON REQUEST: Manual override

CODE ① ②	Port Size NPT	Orifice Size		Flow Factor Cv (gpm)	Operating Pressure Differential (M.O.P.D.) ③						Nominal power			Coil		Seal ①	Temp. range (°F)
		(in)	(mm)		Min		Max		AC Inrush (VA)	DC Holding (W)	Series	Width (mm)					
					(psi)	(bar)	AC (psi)	DC (bar)					④				
E207BN...10///...	1/4	0.394	10	1.73	2.2	0.15	217	15	217	15	12	8	6.5	3	22	NBR=B EPDM=E FPM=V	+14 +194 +14 +284 +14 +284
E207CN...10///...	3/8	0.394	10	1.97	2.2	0.15	217	15	217	15							
E207CN...12///...	3/8	0.472	12	2.54	2.2	0.15	217	15	217	15							
E207DN...12///...	1/2	0.472	12	2.89	2.2	0.15	217	15	217	15							
E207EN...18///...	3/4	0.709	18	6.36	2.2	0.15	188	13	188	13							
E207FN...25///...	1	0.984	25	11.79	2.2	0.15	145	10	145	10							
E207GN...30///...	1-1/4	1.181	30	17.34	2.2	0.15	145	10	145	10	15	11	8	4	30	NBR=B EPDM=E FPM=V	+14 +194 +14 +284 +14 +284
E207BN...10///...	1/4	0.394	10	1.73	2.2	0.15	217	15	217	15							
E207CN...10///...	3/8	0.394	10	1.97	2.2	0.15	217	15	217	15							
E207CN...12///...	3/8	0.472	12	2.54	2.2	0.15	217	15	217	15							
E207DN...12///...	1/2	0.472	12	2.89	2.2	0.15	217	15	217	15							
E207EN...18///...	3/4	0.709	18	6.36	2.2	0.15	188	13	188	13							
E207FN...25///...	1	0.984	25	11.79	2.2	0.15	145	10	145	10							
E207GN...30///...	1-1/4	1.181	30	17.34	2.2	0.15	145	10	145	10							






① Seal Ordination example: E207DNB12///U351 NBR seal, connection 1/2 NPT

② Coil Coil 24V DC certified c us and marked

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.

④ Direct current (DC) series 3 coil available only without UL certification

Series 207

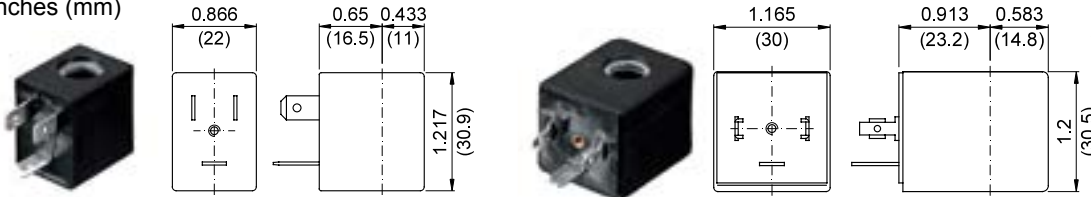
COILS Code ②	Alternating Current						Direct Current				Electrical connection	Connectors
	24V		120V		240V		12V		24V			
Series 3 Width 22mm	U35B c 	30B	U35D c 	30D	U35F c 	30F	-	300	-	301	DIN 46244	PG9 code 10348000
Series 4 Width 30mm	-	40B	-	40D	-	40F	U450 c 	400	U451 c 	401	DIN 43650A	PG9 code 10349000

DESCRIPTION
Class F or H insulation
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)



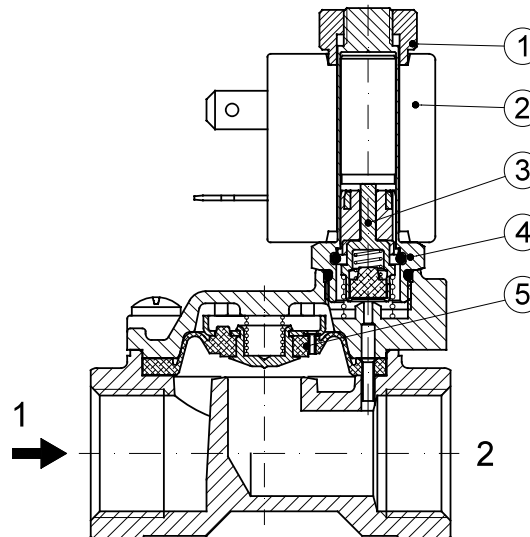
Series 3 Weight 0.11lb (0.05Kg)

Series 4 Weight 0.22lb (0.1Kg)

FOR COIL SPECIFICATION SEE SECTION 6

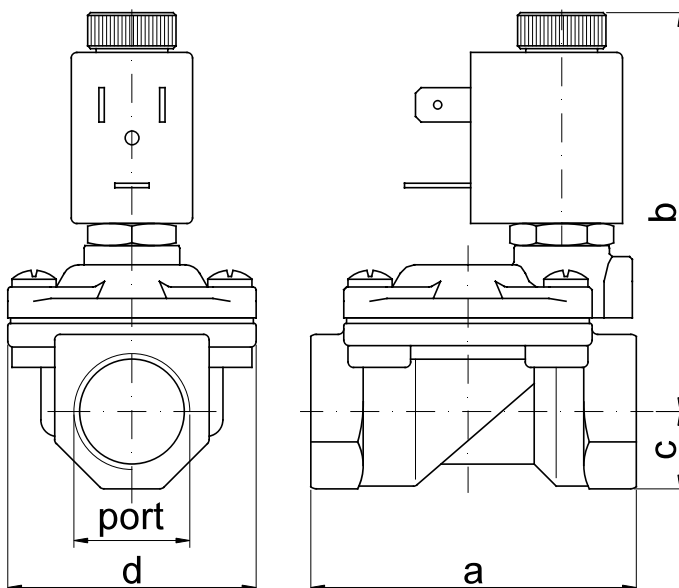
SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Seal assembly
4. Armature tube assembly
5. Diaphragm assembly



OVERALL DIMENSIONS

inches (mm)



PORT SIZE	a		b		c		d		weight	
	in	mm	in	mm	in	mm	in	mm	lb	Kg
1/4 Ø0.394 (Ø10)	1.93	49	2.83	72	0.43	11	1.26	32	0.53	0.24
3/8 Ø0.394 (Ø10)	1.93	49	2.83	72	0.43	11	1.26	32	0.51	0.23
3/8 Ø0.472 (Ø12)	2.32	59	3.03	77	0.55	14	1.77	45	0.93	0.42
1/2 Ø0.472 (Ø12)	2.32	59	3.03	77	0.55	14	1.77	45	0.86	0.39
3/4	3.11	79	3.27	83	0.71	18	2.17	55	1.43	0.65
1	3.78	96	3.62	92	0.79	20	2.83	72	2.31	1.05
1-1/4 Ø1.181 (Ø30)	4.69	119	3.90	99	0.98	25	3.35	85	3.75	1.70

DESCRIPTION

Solenoid valve 2 way normally open with servo-assisted diaphragm

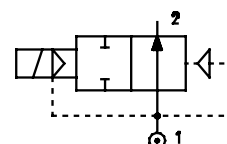
CONSTRUCTION

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



FEATURES

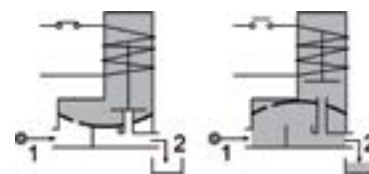
- Minimum differential pressure 2.2÷44psi
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: from +14°F to +176°F according to the coil
- Preferred mounting position with vertical coil above



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OPTIONS: Electroless nickel plating

ON REQUEST: Manual override



CODE	Port Size	Orifice Size		Flow Factor Cv	Operating Pressure Differential (M.O.P.D.) ④								Nominal power			Coil		Seal	Temp. range
					Min		Max				AC (VA)	DC (W)	Series	Width (mm)					
					(psi)	(bar)	AC		DC										
①	②	NPT	(in)	(mm)	(gpm)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	Inrush	Holding	(W)		(mm)	①	(°F)	
E207GN...37///...	1-1/4	1.457	37	20.8	2.2	0.15	145	10	145	10	20	15	10	2	30	NBR=B EPDM=E FPM=V	+14 +194 +14 +284 +14 +284		
E207HN...37///...	1-1/2	1.457	37	24.3	2.2	0.15	145	10	145	10									
E207IN...50///...	2	1.969	50	41.6	2.2	0.15	145	10	145	10									
E207MNB75///...	2-1/2	2.953	75	86.7	4.4	0.3	72.5	5	72.5	5	20	15	10	2	30	NBR=B	+14 +194		
E207RNB75///...	3	2.953	75	97.1	4.4	0.3	72.5	5	72.5	5									
③E207MNB75/W/...	2-1/2	2.953	75	86.7	44	3	217	15	217	15	40	30	27	5	36	NBR=B	+14 +194		
③E207RNB75/W/...	3	2.953	75	97.1	44	3	217	15	217	15									

- ① Seal Ordination example: E207INB50///U251 NBR seal, connection 2 NPT
- ② Coil Coil 24V DC certified and marked
- ③ Reinforced diaphragm
- ④ Safe Working Pressure:290 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.

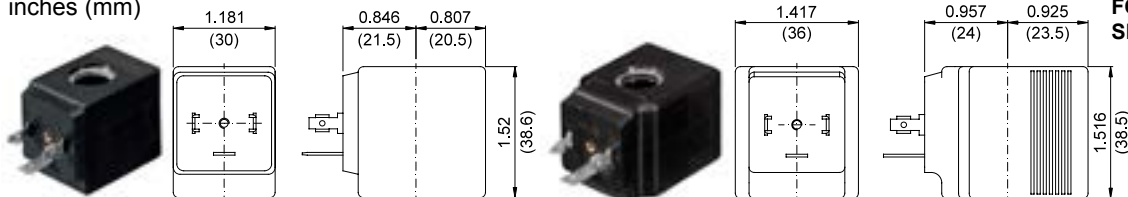
Series 207

COILS Code ②	Alternating Current						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	U250 c us	200	U251 c us	201	DIN 43650A	PG9 code 10349000	
Series 5 Width 36mm	U55B c us	52B	U55D c us	52D	U55F c us	52F	U550 c us	520	U551 c us	521	DIN 43650A	PG11 code 10349001	

OPTIONS
Cable attached
Special coil voltage
Special coil powers

OVERALL DIMENSIONS

inches (mm)



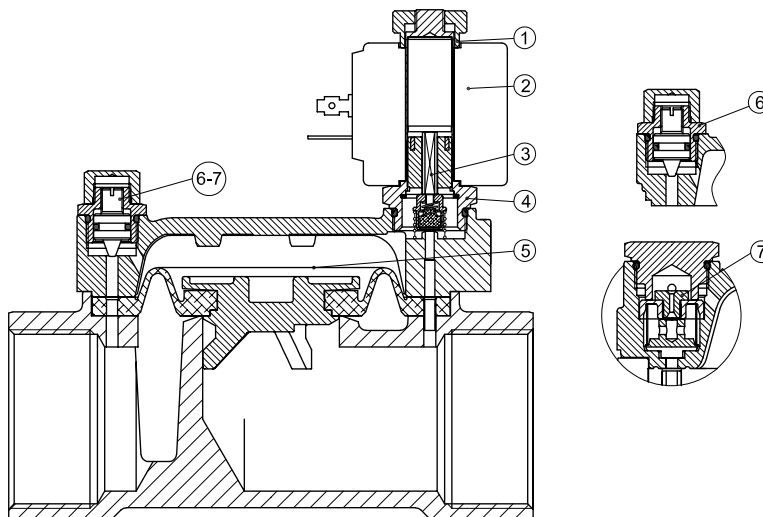
Series 2 Weight 0.26lb (0.12Kg)

Series 5 Weight 0.44lb (0.20Kg)

FOR COIL SPECIFICATION SEE SECTION 6

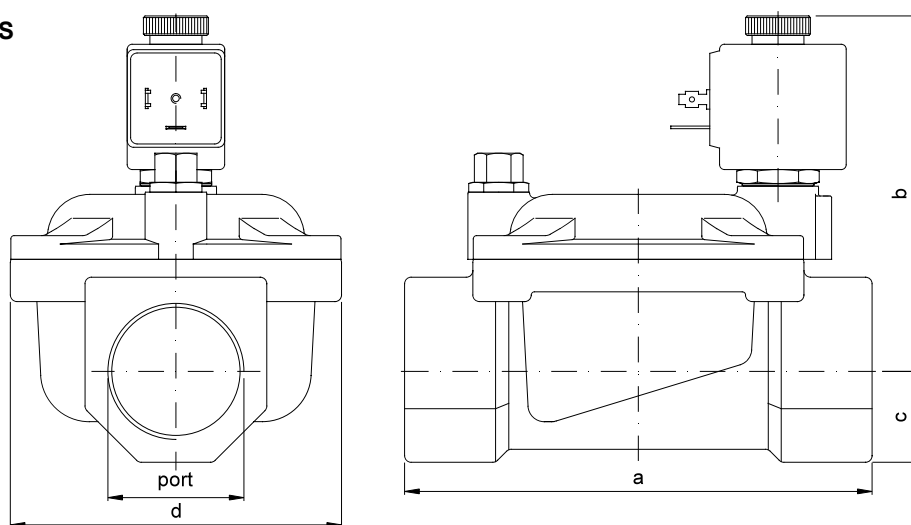
SPARE PARTS LIST

- Coil fixing nut
- Coil
- Seal assembly
- Armature tube with core
- Diaphragm assembly
- Speed control valve
- Water hammering reducer
Ø0.03-Ø0.039-Ø0.04
(Ø0.8-Ø1.2-Ø1.5)



OVERALL DIMENSIONS

inches (mm)



PORT SIZE	a		b		c		d		weight	
	in	mm	in	mm	in	mm	in	mm	lb	Kg
1-1/4	5.59	142	4.33	110	1.1	28	4.02	102	6.61	3
1-1/2	5.59	142	4.33	110	1.1	28	4.02	102	6.28	2.85
2	6.22	158	4.72	120	1.38	35	4.69	119	9.48	4.3
2-1/2	8.9	226	5.47	139	2.01	51	6.65	169	25.8	11.7
3	8.9	226	5.47	139	2.01	51	6.65	169	21.8	9.9