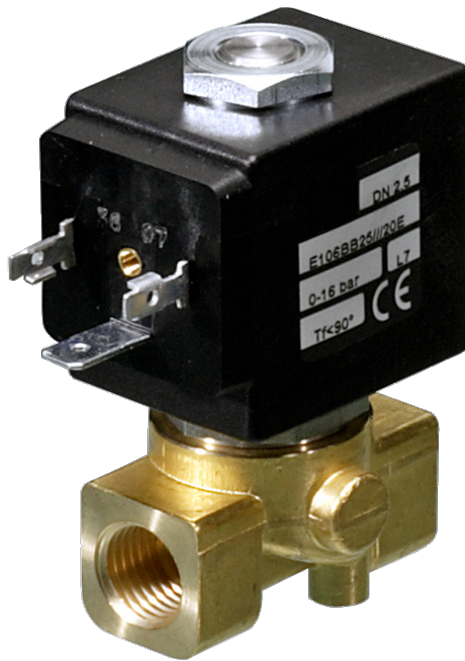


106 Series NPT Thread

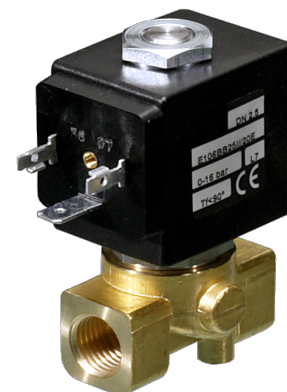


DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

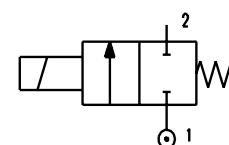
Body	Brass
Armature tube	AISI 303
Plunger and core	AISI 430FR
Springs	AISI 302
Seal material	NBR - FPM - EPDM - PTFE



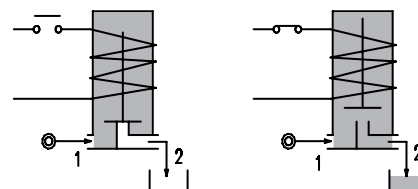
2

FEATURES

Maximum fluid viscosity 25cSt (mm²/s)
Ambient temperature: from +14°F to +176°F according to the coil
Universal mounting position



OPTIONS: Manual override
Electroless nickel plating
Stainless steel seat insert (up to Ø0.177in)
Version for use with industrial oxygen



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

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 Inrush (VA)	DC Holding (W)	Series	Width (mm)					
						AC (psi)	AC (bar)					DC (psi)	DC (bar)			
① ②	NPT	(in)	(mm)	(gpm)										①	(°F)	
E106BN...15///...	1/4	0.059	1.5	0.081	0	435	30	377	26	20	15	10	2	30	NBR=B	+14 +194
E106BN...20///...		0.079	2	0.116	0	319	22	290	20							
E106BN...25///...		0.098	2.5	0.173	0	232	16	203	14							
E106BN...35///...		0.138	3.5	0.370	0	145	10	108	7.5							
E106BN...45///...		0.177	4.5	0.474	0	79	5.5	43.5	3							
E106BN...52///...		0.205	5.2	0.543	0	50	3.5	29	2							
E106BN...64///...		0.252	6.4	0.740	0	29	2	14.5	1							
E106BN...15///...	1/4	0.059	1.5	0.081	0	507	35	435	30	25	20	14	5	36	EPDM=E	+14 +284
E106BN...20///...		0.079	2	0.116	0	435	30	362	25							
E106BN...25///...		0.098	2.5	0.173	0	362	25	290	20							
E106BN...35///...		0.138	3.5	0.370	0	261	18	217	15							
E106BN...45///...		0.177	4.5	0.474	0	152	10.5	79	5.5							
E106BN...52///...		0.205	5.2	0.543	0	108	7.5	58	4							
E106BN...64///...		0.252	6.4	0.740	0	58	4	29	2							
E106BN...15///...	1/4	0.059	1.5	0.081	0	1160	80	1160	80	40	30	27	5	36	PTFE=W	+14 +356
E106BN...20///...		0.079	2	0.116	0	725	50	580	40							
E106BN...25///...		0.098	2.5	0.173	0	507	35	478	33							
E106BN...35///...		0.138	3.5	0.370	0	290	20	275	19							
E106BN...45///...		0.177	4.5	0.474	0	203	14	188	13							
E106BN...52///...		0.205	5.2	0.543	0	145	10	130	9							
E106BN...64///...		0.252	6.4	0.740	0	72.5	5	65	4.5							

① Seal

Ordination example: E106BNB20///U25F NBR seal, connection 1/4 NPT

② Coil

Coil 240V 60Hz certified US and marked

③ For PTFE seals the maximum allowable leakage is 0,0008gpm

④ 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.

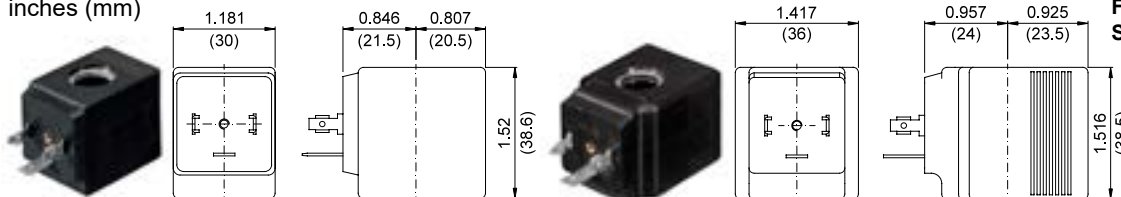
COILS Code ②	Alternating Current						Direct Current				Electrical connection	Connectors
	24V		120V		240V		12V		24V			
Series 2 Width 30mm	U25B <small>c</small>	201	U25D <small>c</small>	20D	U25F <small>c</small>	20F	U250 <small>c</small>	200	U251 <small>c</small>	201	DIN 43650A	PG9 code 10349000
Series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



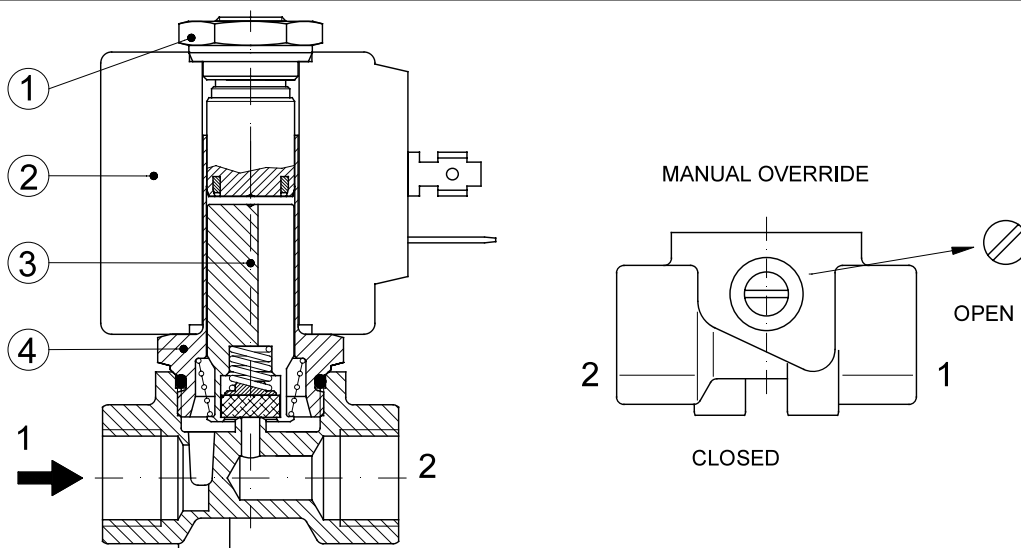
Series 2 Weight 0.26lb (0.12Kg)

Series 5 Weight 0.44lb (0.20Kg)

FOR COIL SPECIFICATION SEE SECTION 6

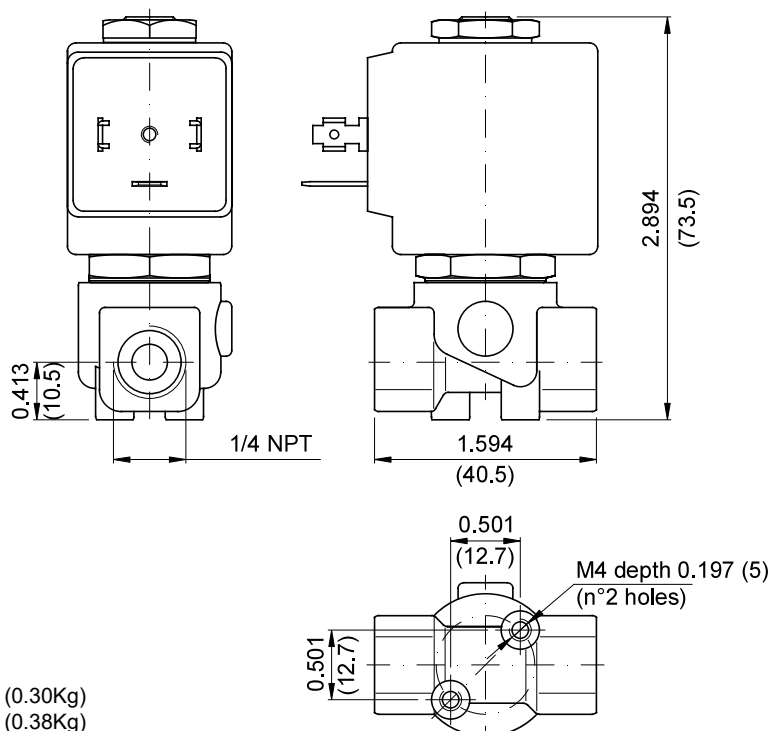
SPARE PARTS LIST

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



OVERALL DIMENSIONS

inches (mm)



Weight with coil series 2=0.66lb (0.30Kg)

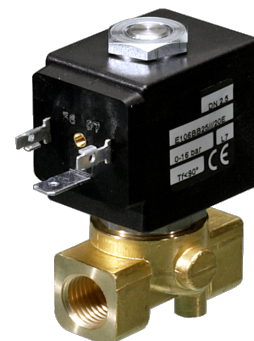
Weight with coil series 5=0.84lb (0.38Kg)

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

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

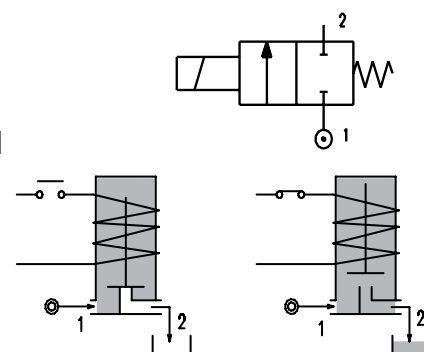


2

FEATURES

Maximum fluid viscosity 25cSt (mm²/s)
Ambient temperature: from +14°F to +176°F according to the coil
Universal mounting position

OPTIONS: Electroless nickel plating
Stainless steel seat insert (up to Ø0.177in)
Version for use with industrial oxygen



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

CODE ① ② ③	Port Size NPT	Orifice Size		Flow Factor Cv (gpm)	Operating Pressure Differential (M.O.P.D.) ⑤				Nominal power			Coil		Seal ②	Temp. range (°F)	
		(in)	(mm)		Min	Max		AC (VA) Inrush Holding	DC (W)	Series	Width (mm)					
						(psi)	(bar)					(psi)	(bar)			
E106...N...30///...	3/8 1/2	0.118	3	0.289	0	188	13	145	10	20	15	10	2	30	NBR=B	+14 +194
E106...N...35///...		0.138	3.5	0.370	0	145	10	108	7.5							
E106...N...40///...		0.157	4	0.416	0	108	7.5	72.5	5							
E106...N...45///...		0.177	4.5	0.474	0	79	5.5	43.5	3							
E106...N...52///...		0.205	5.2	0.543	0	50	3.5	29	2							
E106...N...64///...		0.252	6.4	0.740	0	29	2	14.5	1							
E106...N...30///...	3/8 1/2	0.118	3	0.289	0	319	22	261	18	27	20	14	5	36	EPDM=E	+14 +284
E106...N...35///...		0.138	3.5	0.370	0	261	18	217	15							
E106...N...40///...		0.157	4	0.416	0	188	13	145	10							
E106...N...45///...		0.177	4.5	0.474	0	152	10.5	79	5.5							
E106...N...52///...		0.205	5.2	0.543	0	108	7.5	58	4							
E106...N...64///...		0.252	6.4	0.740	0	58	4	29	2							
E106...N...30///...	3/8 1/2	0.118	3	0.289	0	362	25	348	24	40	30	27	5	36	PTFE=W ④	+14 +356
E106...N...35///...		0.138	3.5	0.370	0	290	20	275	19							
E106...N...40///...		0.157	4	0.416	0	232	16	217	15							
E106...N...45///...		0.177	4.5	0.474	0	203	14	188	13							
E106...N...52///...		0.205	5.2	0.543	0	145	10	130	9							
E106...N...64///...		0.252	6.4	0.740	0	72.5	5	65	4.5							

① Port size: C=3/8 D=1/2

② Seal Ordination example: E106CNB20///U25B NBR seal, connection 3/8 NPT

③ Coil Coil 24V 60Hz certified c us 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.

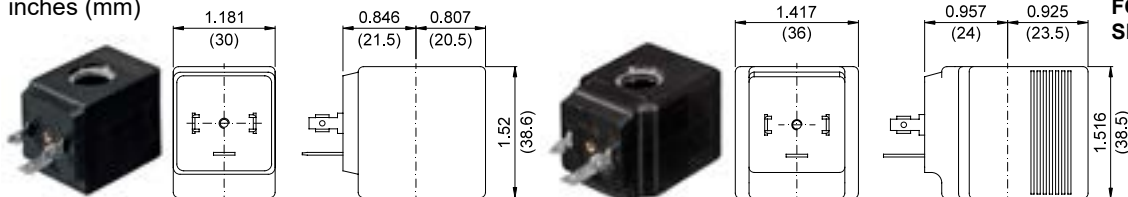
COILS Code ③	Alternating Current						Direct Current				Electrical connection	Connectors
	24V		120V		240V		12V		24V			
Series 2 Width 30mm	U25B 	201	U25D 	20D	U25F 	20F	U250 	200	U251 	201	DIN 43650A	PG9 code 10349000
Series 5 Width 36mm	U55B 	521	U55D 	52D	U55F 	52F	U550 	520	U551 	521	DIN 43650A	PG11 code 10349001

DESCRIPTION
 Insulation class F or H
 Voltage tolerance ±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)



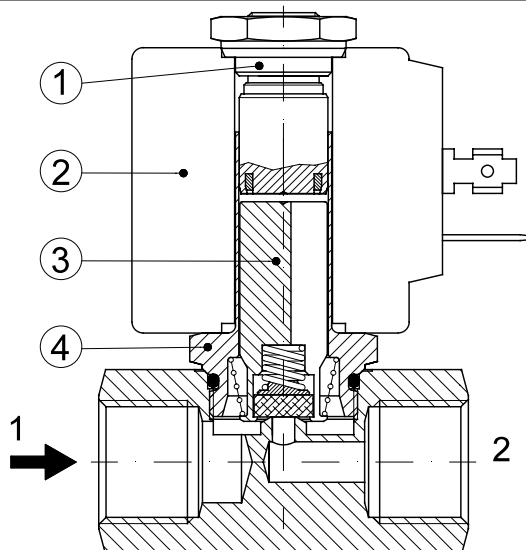
Series 2 Weight 0.26lb (0.12Kg)

Series 5 Weight 0.44lb (0.20Kg)

FOR COIL SPECIFICATION SEE SECTION 6

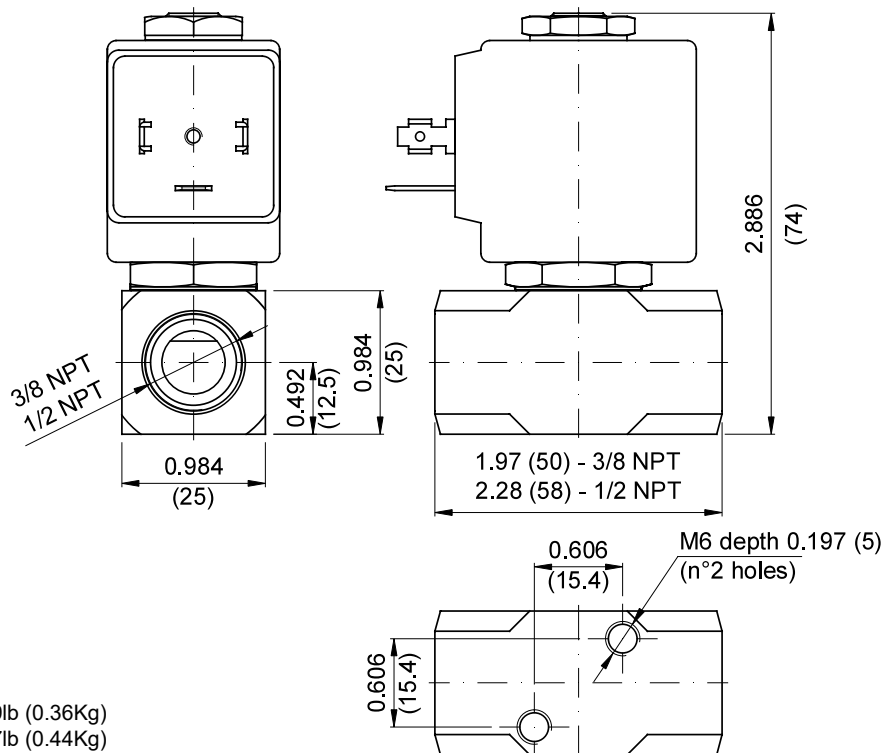
SPARE PARTS LIST

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



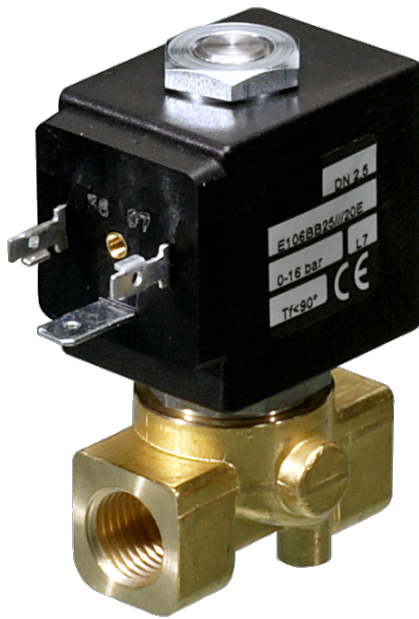
OVERALL DIMENSIONS

inches (mm)



Weight with coil series 2=0.79lb (0.36Kg)
 Weight with coil series 5=0.97lb (0.44Kg)

106 Series BSP Thread

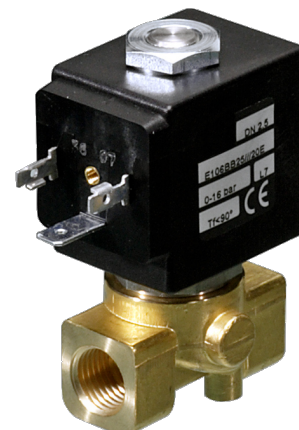


DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

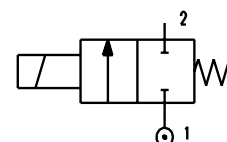
Body	Brass
Armature tube	AISI 303
Plunger and core	AISI 430FR
Springs	AISI 302
Seal material	NBR - FPM - EPDM - PTFE




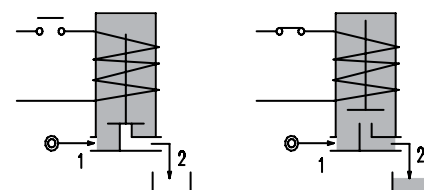
2

FEATURES

Maximum allowable pressure PS 100bar^④
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: from -10°C to +80°C according to the coil
 Universal mounting position



OPTIONS: Manual override
 Electroless nickel plating
 Stainless steel seat insert (up to Ø4.5)
 Versions for use with industrial oxygen
 c  US certified coils



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

CODE ① ② ③	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ②	Temp. range °C	
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width			
					AC	DC								
E106... ..10///...	1/8"	1	0.04	0	80	80	20	15	10	2	30	NBR=B	-10 +90	
E106... ..12///...		1.2	0.05	0	60	60								
E106... ..15///...		1.5	0.07	0	30	26								
E106... ..20///...		2	0.1	0	22	20								
E106... ..25///...		2.5	0.15	0	16	14								
E106... ..30///...		1/4"	3	0.25	0	15								10
E106... ..35///...			3.5	0.32	0	10								8
E106... ..40///...			4	0.36	0	8								5
E106... ..45///...			4.5	0.41	0	6.5								3.5
E106... ..52///...		1/4"	5.2	0.47	0	4								1.8
E106... ..64///...	6.4		0.64	0	3	1								
E106... ..10///...	1/8"	1	0.04	0	100	100	40	30	27	5	36	FPM=V	-10 +140	
E106... ..12///...		1.2	0.05	0	100	100								
E106... ..15///...		1.5	0.07	0	80	80								
E106... ..20///...		2	0.1	0	50	40								
E106... ..25///...		2.5	0.15	0	35	33								
E106... ..30///...		1/4"	3	0.25	0	25								24
E106... ..35///...			3.5	0.32	0	20								19
E106... ..40///...			4	0.36	0	16								15
E106... ..45///...			4.5	0.41	0	14								13
E106... ..52///...		1/4"	5.2	0.47	0	10								9
E106... ..64///...	6.4		0.64	0	5	4.5								

① Connection: A=1/8" , B=1/4"

② Seal

Example: E106BB25///20E NBR seal

③ Coil


Coil 230V 50/60Hz

④ Maximum allowable leakage <0.2NI/h

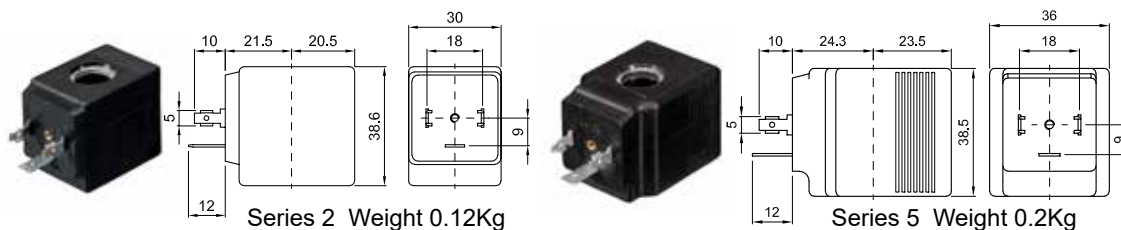
⑤ The maximum allowable pressure PS for steam is 9bar (gauge pressure) with PTFE seals and 2,5bar with EPDM seals

COILS ③	Alternating Current 50/60Hz (V)							Direct Current (V)			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36	52A	52B	52C	52D	52E	52F	52G	520	521	522	DIN 43650A	PG11 code 10349001

DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector

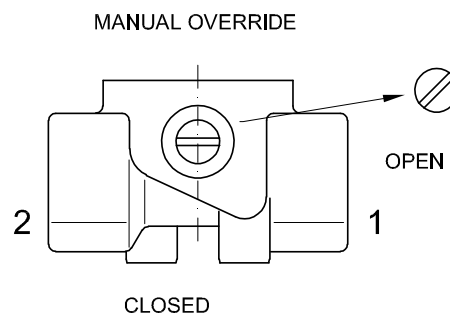
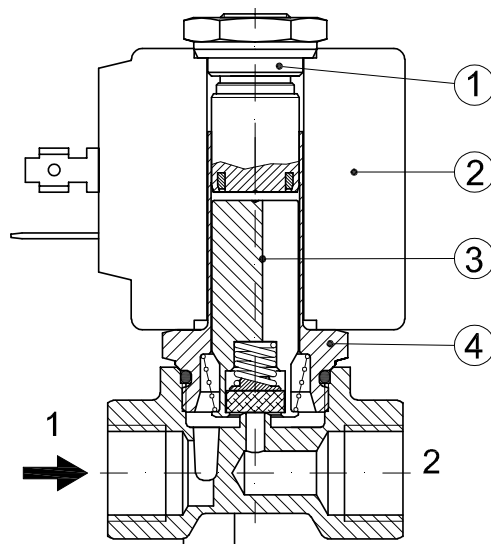
OPTIONS
 Class H insulation (series 2)
 Cable attached
 Special coil voltage
 Special coil powers
 US certified coils

(for coil details see section 8)

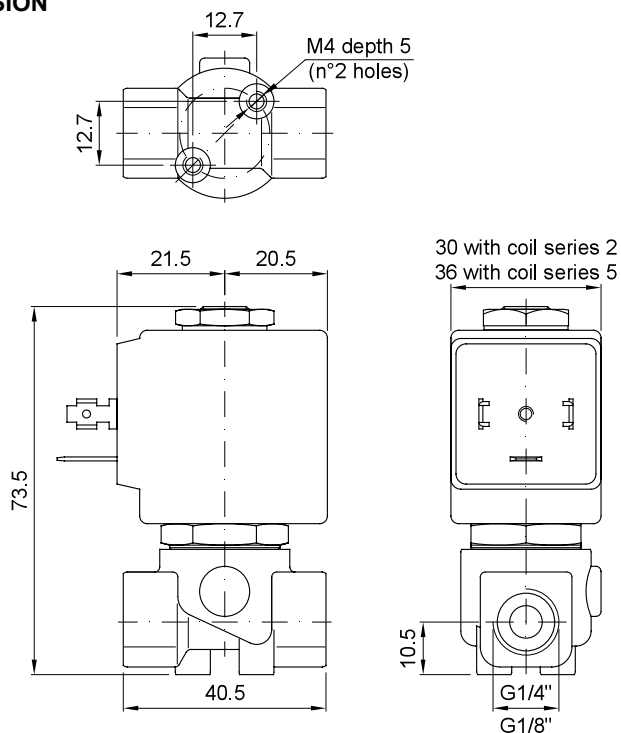


SPARE PARTS LIST

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



OVERALL DIMENSION



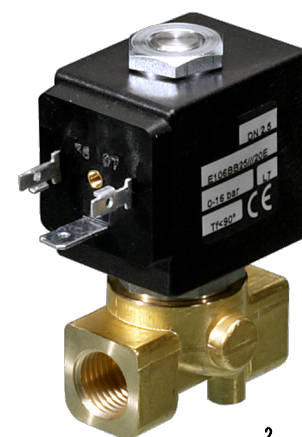
Weight with coil series 2=0.30Kg
 Weight with coil series 5=0.38Kg

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

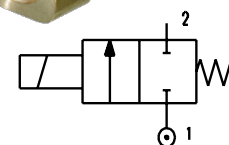
Body	Brass
Armature tube	AISI 303
Plunger and core	AISI 430FR
Springs	AISI 302
Seal material	NBR - FPM - EPDM - PTFE




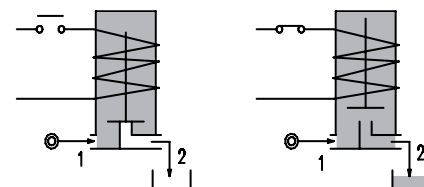
2

FEATURES

Maximum allowable pressure PS 100bar^⑤
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: from -10°C to +80°C according to the coil
 Universal mounting position



OPTIONS: Electroless nickel plating
 Stainless steel seat insert (up to Ø4.5)
 Versions for use with industrial oxygen
 c  us certified coils



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

CODE ① ② ③	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ②	Temp. range °C	
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width			
					AC	DC								
E106... ..10///...	3/8"	1	0.04	0	80	80	20	15	10	2	30	NBR=B	-10 +90	
E106... ..12///...		1.2	0.05	0	60	60								
E106... ..15///...		1.5	0.07	0	30	26								
E106... ..20///...		2	0.1	0	22	20								
E106... ..25///...		2.5	0.15	0	16	14								
E106... ..30///...		3	0.25	0	15	10								
E106... ..35///...		1/2"	3.5	0.32	0	10								8
E106... ..40///...			4	0.36	0	8								5
E106... ..45///...			4.5	0.41	0	6.5								3.5
E106... ..52///...			5.2	0.47	0	4								1.8
E106... ..64///...	3/8"	6.4	0.64	0	3	1	40	30	27	5	36	FPM=V	-10 +140	
E106... ..10///...		1	0.04	0	100	100								
E106... ..12///...		1.2	0.05	0	100	100								
E106... ..15///...		1.5	0.07	0	80	80								
E106... ..20///...		2	0.1	0	50	40								
E106... ..25///...		2.5	0.15	0	35	33								
E106... ..30///...		1/2"	3	0.25	0	25								24
E106... ..35///...			3.5	0.32	0	20								19
E106... ..40///...			4	0.36	0	16								15
E106... ..45///...			4.5	0.41	0	14								13
E106... ..52///...	1/2"	5.2	0.47	0	10	9	40	30	27	5	36	PTFE=W ④	-10 +180	
E106... ..64///...		6.4	0.64	0	5	4.5								

① Connection: C=3/8" , D=1/2"

② Seal

Example: E106CB20///20E NBR seal

③ Coil


Coil 230V 50/60Hz

④ Maximum allowable leakage <0.2NI/h

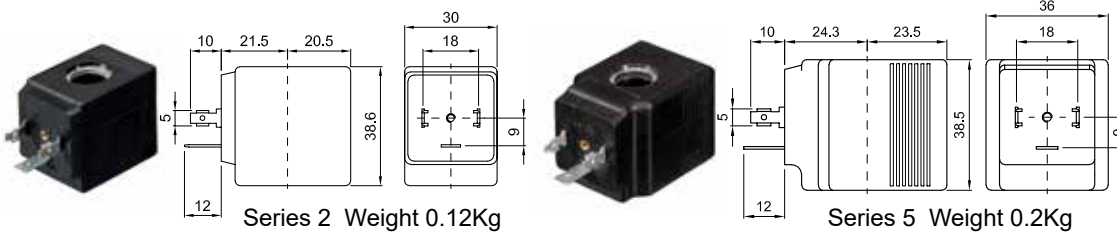
⑤ The maximum allowable pressure PS for steam is 9bar (gauge pressure) with PTFE seals and 2,5bar with EPDM seals

COILS ③	Alternating Current 50/60Hz (V)							Direct Current (V)			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36	52A	52B	52C	52D	52E	52F	52G	520	521	522	DIN 43650A	PG11 code 10349001

DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector

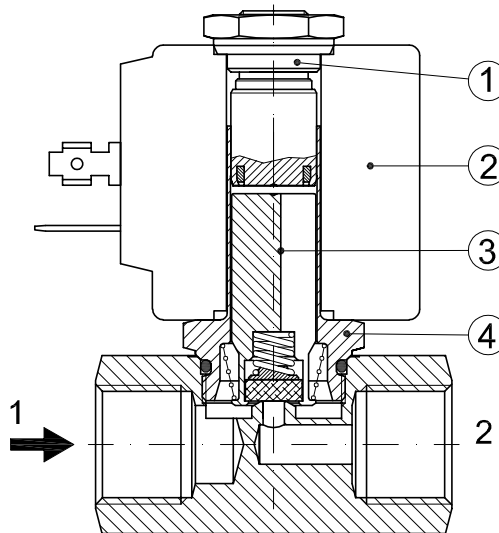
OPTIONS
 Class H insulation (series 2)
 Cable attached
 Special coil voltage
 Special coil powers
 c  US certified coils

(for coil details see section 8)

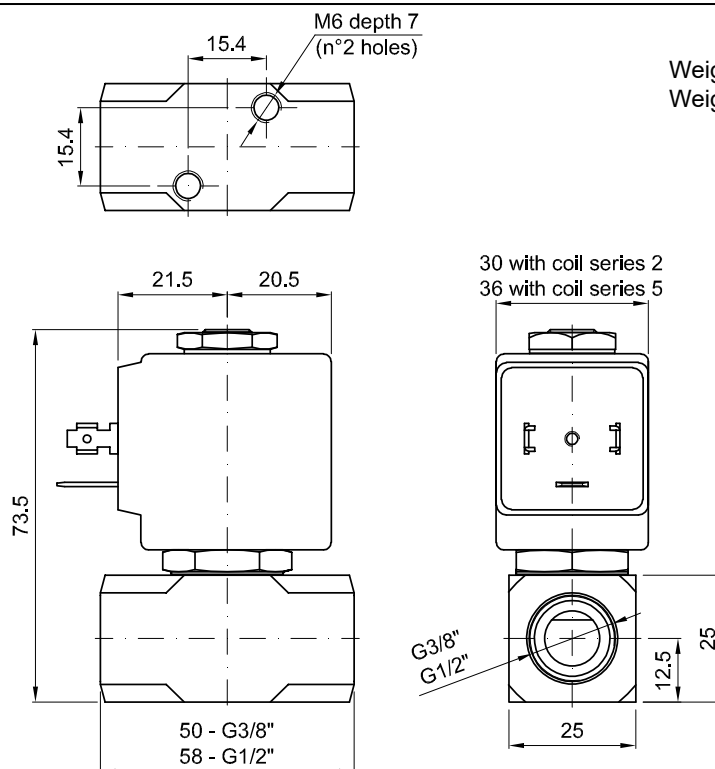


SPARE PARTS LIST

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



OVERALL DIMENSION



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