



Brass Solenoid Valves



Available from

Beta Valve

BetaValve.com

01494 459 511

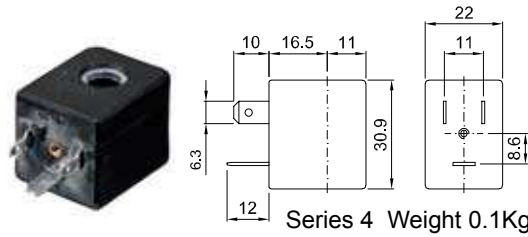
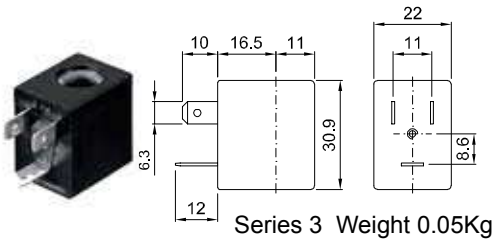
Sales@betavalve.com

Park House Business Centre, Desborough Park Road, High Wycombe Bucks HP12 3DJ

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000
Series 4 Width 30 Code ②	40A	40B	40C	40D	40E	40F	40G	400	401	402	DIN 43650A	PG9 code 10349000

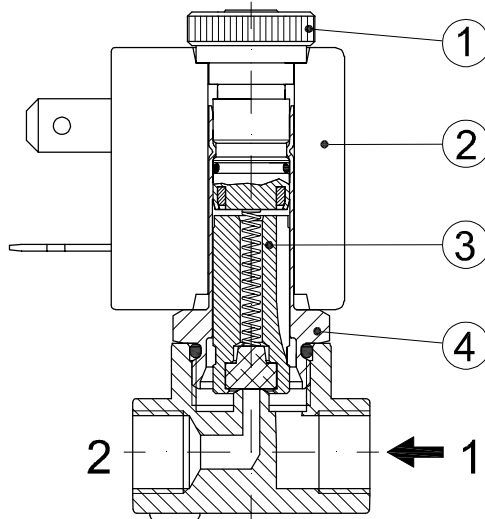
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

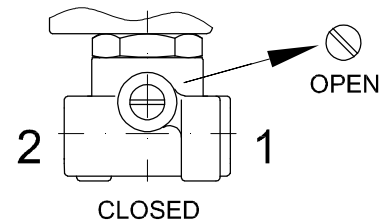


SPARE PARTS LIST

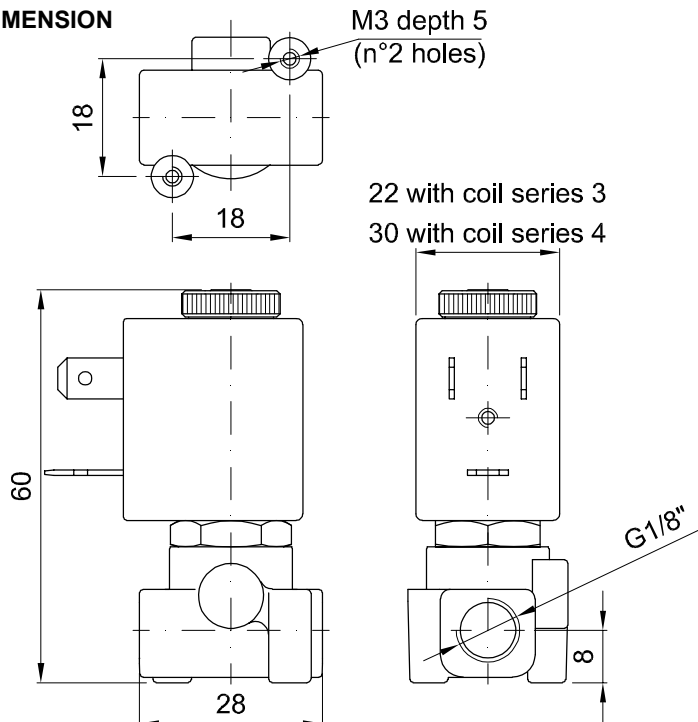
1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core



MANUAL OVERRIDE



OVERALL DIMENSION



Weight with coil series 3=0.13Kg
 Weight with coil series 4=0.18Kg

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

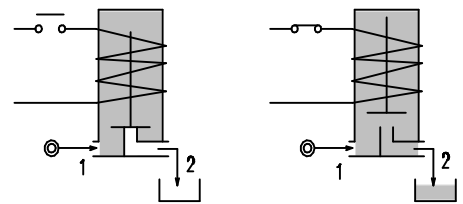
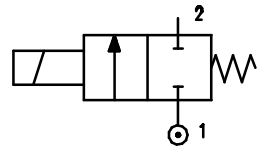
Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	FPM



2

FEATURES

Maximum allowable pressure 50 bar *
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature : with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



CODE ②	Connection G ISO 228	Orifice mm	KV m ³ /h	Differential pressure bar			Nominal power			Coil		Seal	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
W105AV15///.....	1/8"	1.5	0.06	0	14	3	12	8	6.5	3	22	FPM=V	-10 +130

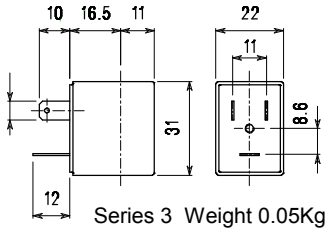
② Coil

* REMARK: The maximum allowable pressure PS for steam is 2,5bar (gauge pressure)

COILS	Alternating Current ~50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

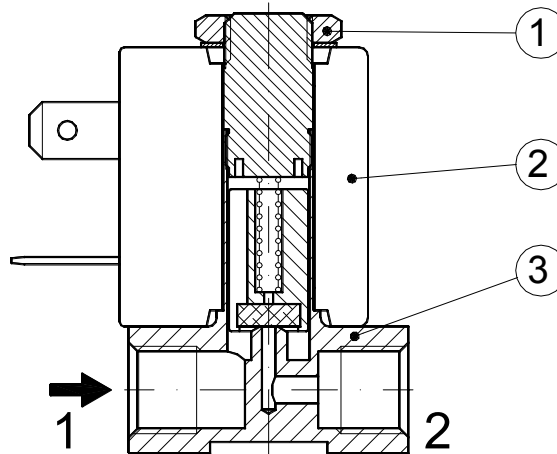
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector mounted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

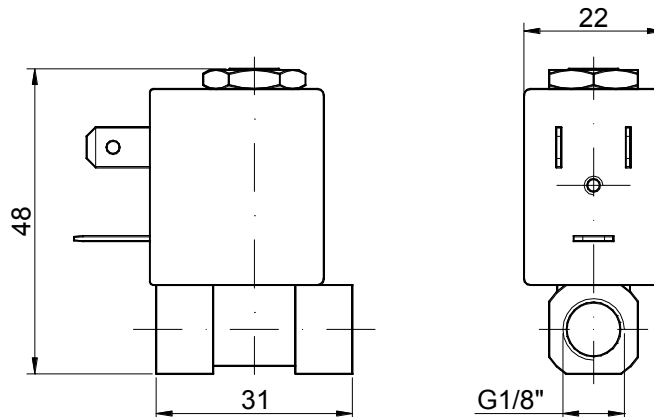


SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Valve



OVERALL DIMENSION



Weight = 0.09 Kg

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

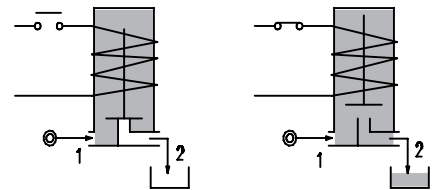
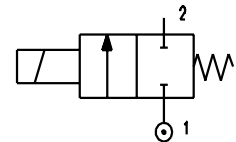
Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM PTFE



2

FEATURES

Maximum allowable pressure 80bar*
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS: Manual override
 Electroless nickel plating
 Stainless steel seat insert
 Version for use with oxygen

CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C														
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width																
					AC	DC																					
E106A...15///...	1/8"	1.5	0.07	0	30	26	20	15	10	2	30	NBR=B	-10 +90														
E106A...20///...		2	0.1	0	22	20																					
E106A...25///...		2.5	0.15	0	16	14																					
E106A...35///...		3.5	0.32	0	10	8																					
E106B...15///...	1/4"	1.5	0.07	0	30	26								40	30	27	5	36	EPDM=E	-10 +140							
E106B...20///...		2	0.1	0	22	20																					
E106B...25///...		2.5	0.15	0	16	14																					
E106B...35///...		3.5	0.32	0	10	8																					
E106B...45///...	1/4"	4.5	0.41	0	6.5	3.5															40	30	27	5	36	PTFE=W	-10 +180
E106B...52///...		5.2	0.47	0	4	1.8																					
E106B...64///...		6.4	0.64	0	3	1																					
E106A...15///...		1/8"	1.5	0.07	0	80																					
E106A...20///...	2		0.1	0	50	40																					
E106A...25///...	2.5		0.15	0	35	33																					
E106A...35///...	3.5		0.32	0	20	19																					
E106B...15///...	1/4"	1.5	0.07	0	80	80	40	30	27	5	36	PTFE=W	-10 +180														
E106B...20///...		2	0.1	0	50	40																					
E106B...25///...		2.5	0.15	0	35	33																					
E106B...35///...		3.5	0.32	0	20	19																					
E106B...45///...	1/4"	4.5	0.41	0	14	13								40	30	27	5	36	PTFE=W	-10 +180							
E106B...52///...		5.2	0.47	0	10	9																					
E106B...64///...		6.4	0.64	0	5	4.5																					

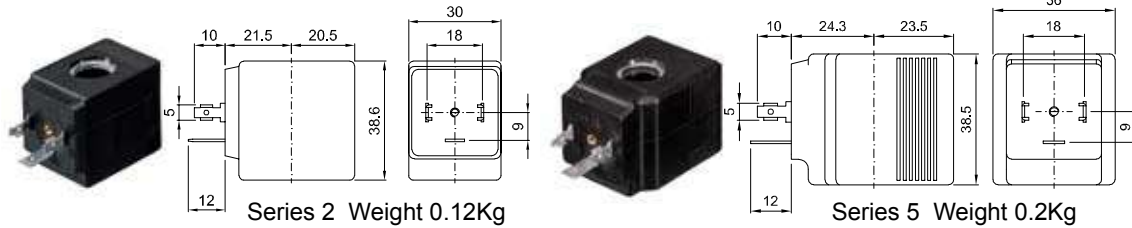
① Seal Example: E106BB20///20E NBR seal
 ② Coil Coil 230V 50/60Hz

* REMARK: The maximum allowable pressure PS for steam is 6bar with PTFE seals and 2,5bar with EPDM seals

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

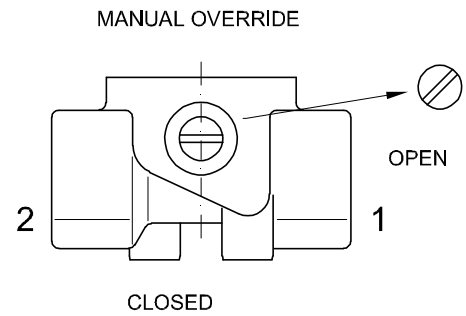
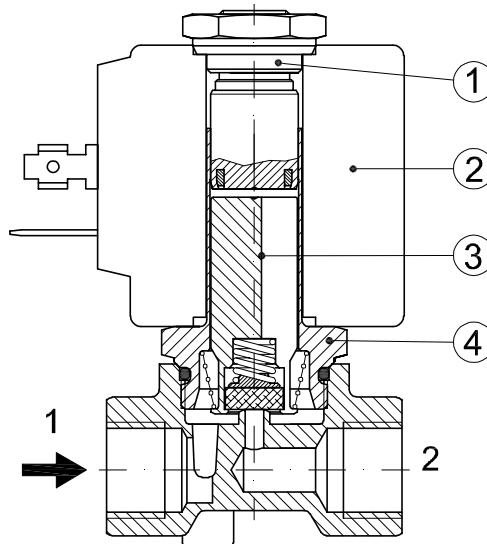
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

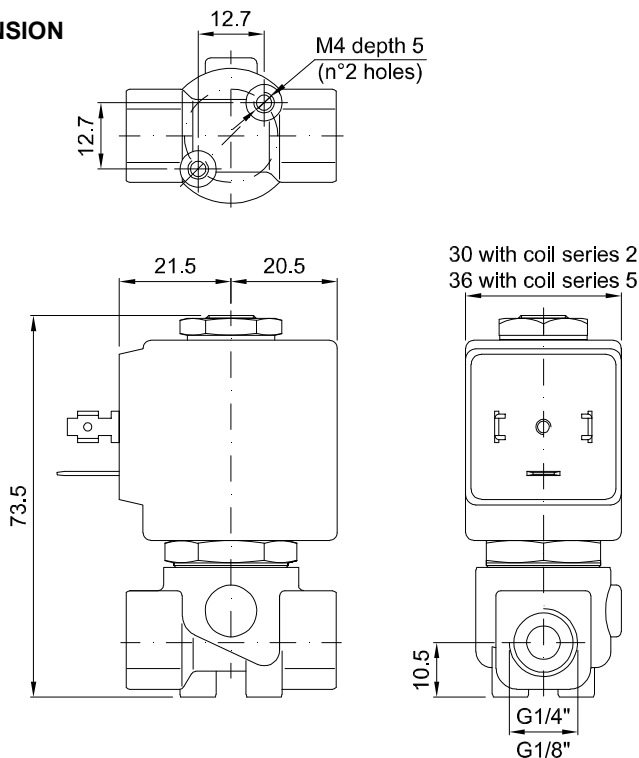


SPARE PARTS LIST

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



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

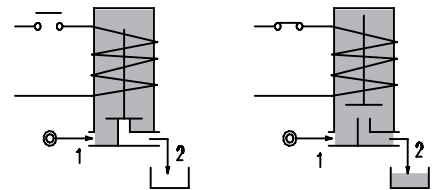
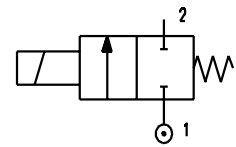
Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM PTFE



2

FEATURES

Maximum allowable pressure 80bar*
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS: Electroless nickel plating
Version for use with oxygen

CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E106C...30///...	3/8"	3	0.25	0	15	10	20	15	10	2	30	NBR=B	-10 +90
E106C...35///...		3.5	0.32	0	10	8							
E106C...40///...		4	0.36	0	8	5							
E106C...45///...		4.5	0.41	0	6.5	3.5							
E106C...52///...		5.2	0.47	0	4	1.8							
E106C...64///...		6.4	0.64	0	3	1							
E106D...30///...	1/2"	3	0.25	0	15	10	20	15	10	2	30	NBR=B	-10 +90
E106D...35///...		3.5	0.32	0	10	8							
E106D...40///...		4	0.36	0	8	5							
E106D...45///...		4.5	0.41	0	6.5	3.5							
E106D...52///...		5.2	0.47	0	4	1.8							
E106D...64///...		6.4	0.64	0	3	1							
E106C...30///...	3/8"	3	0.25	0	25	24	40	30	27	5	36	FPM=V	-10 +130
E106C...35///...		3.5	0.32	0	20	19							
E106C...40///...		4	0.36	0	16	15							
E106C...45///...		4.5	0.41	0	14	13							
E106C...52///...		5.2	0.47	0	10	9							
E106C...64///...		6.4	0.64	0	5	4.5							
E106D...30///...	1/2"	3	0.25	0	25	24	40	30	27	5	36	PTFE=W ③	-10 +180
E106D...35///...		3.5	0.32	0	20	19							
E106D...40///...		4	0.36	0	16	15							
E106D...45///...		4.5	0.41	0	14	13							
E106D...52///...		5.2	0.47	0	10	9							
E106D...64///...		6.4	0.64	0	5	4.5							

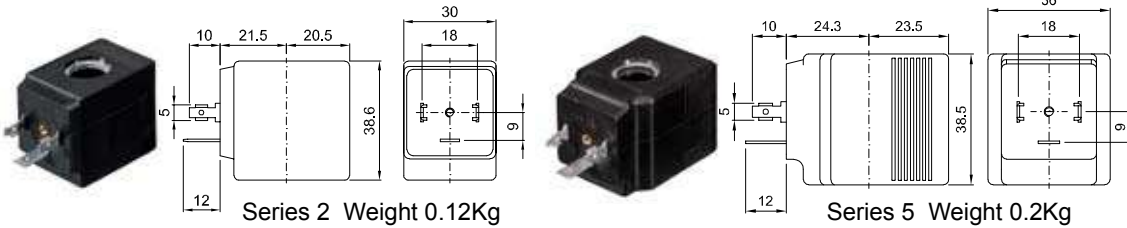
① Seal Example: E106CB20///20E NBR seal
 ② Coil Coil 230V 50/60Hz

* REMARK: The maximum allowable pressure PS for steam is 6bar with PTFE seals and 2,5bar with EPDM seals

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36 Code ②	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
 Continuous service ED100%

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

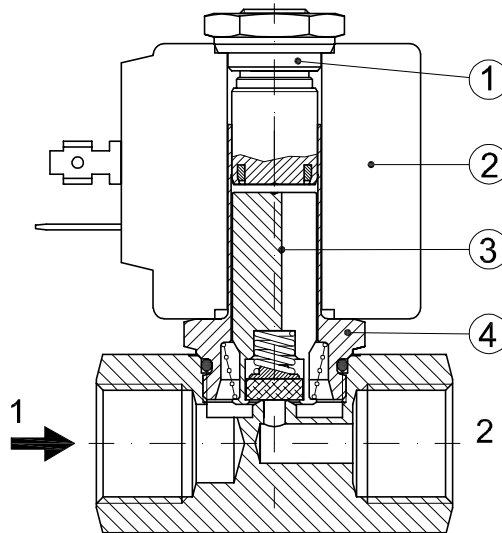


Series 2 Weight 0.12Kg

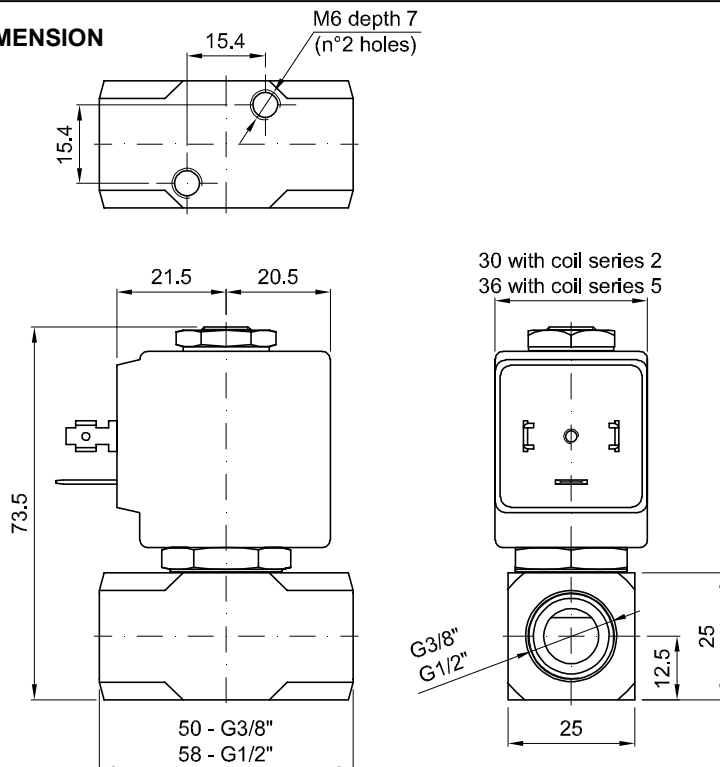
Series 5 Weight 0.2Kg

SPARE PARTS LIST

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



OVERALL DIMENSION



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

DESCRIPTION

Solenoid valve 2 way normally closed
 direct acting poppet type.
 With explosion proof coil certified for hazardous area:

Ex II 2GD Ex d IIC T6 or T5 or T4 Gb
 Ex tb IIC T80°C or T95°C or T130°C Db IP66
 T_{amb} -10°C ÷ +35°C(T6) or +50°C(T5) or +60°C(T4)

(other certifications e.g. Gost-r, Baseefa, CCOE etc. on request)



2

VALVE CONSTRUCTION

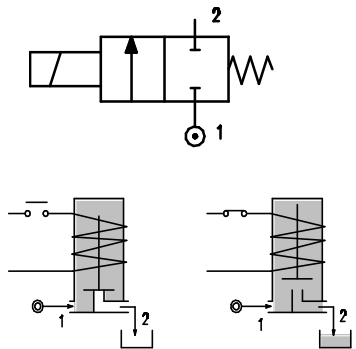
Body Brass
 Seal material FPM

EXPLOSION PROOF CONSTRUCTION

Housing Red colour alloy
 Electrical connection ½" NPT (M20x1,5 on request)

FEATURES

Maximum allowable pressure 80 bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature : -10°C ÷ +35°C(T6), +50°C(T5), +60°C(T4)
 Mounting position with vertical coil above



OPTIONS : Manual override
 Electroless nickel plating
 Stainless steel seat

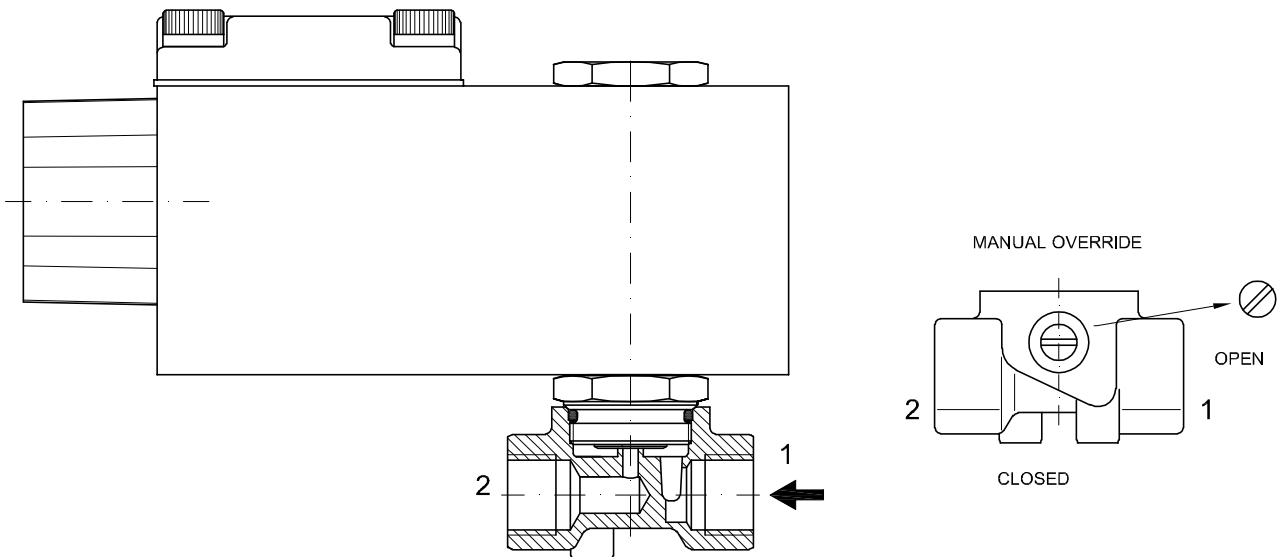
NOTE: The solenoid valve is suitable only with media that are **NOT** potentially explosive.

CODE ①	Connection G ISO 228	Orifice mm	KV m ³ /h	Differential pressure bar			Nominal power		Coil ①	Seal	Temperature range °C
				Min	Max		AC Holding	DC Watt			
					AC	DC					
A106AV15///.....	1/8"	1.5	0.07	0	30	26	12 VA	8 W	A6	FPM=V	-10 +130
A106AV20///.....		2	0.1	0	22	20					
A106AV25///.....		2.5	0.15	0	16	14					
A106AV35///.....		3.5	0.32	0	10	8					
A106BV15///.....	1/4"	1.5	0.07	0	30	26					
A106BV20///.....		2	0.1	0	22	20					
A106BV25///.....		2.5	0.15	0	16	14					
A106BV35///.....		3.5	0.32	0	10	8					
A106BV45///.....		4.5	0.41	0	6.5	3.5					
A106BV52///.....		5.2	0.47	0	4	1.8					
A106BV64///.....	6.4	0.64	0	3	1						

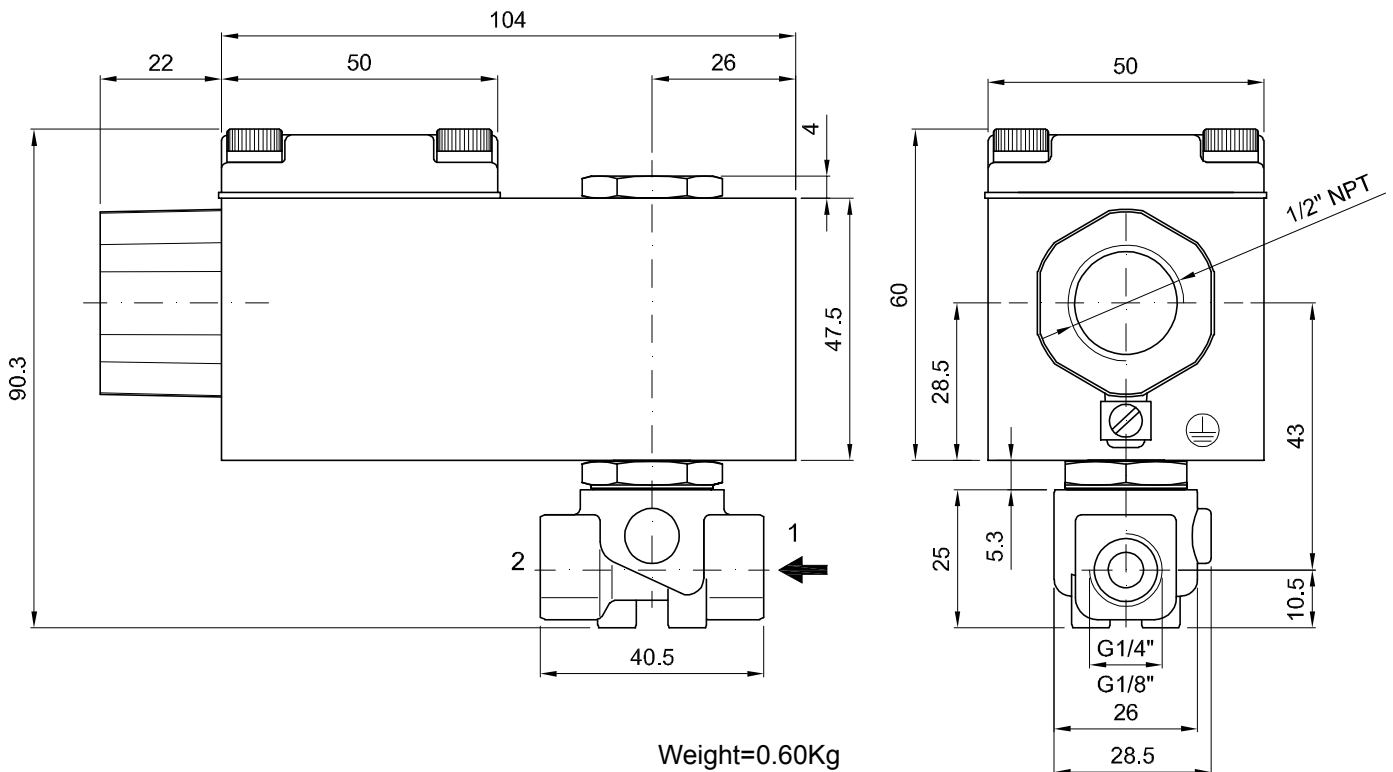
① Coil

COILS	Alternating Current ~50/60Hz Volt				Direct Current Volt			Electrical connection
	24	48	110	220 230	12	24	48	
Series A6 Code ①	A6B	A6C	A6D	A6E	A60	A61	A62	1/2" NPT

DESCRIPTION
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class IP66



OVERALL DIMENSION



DESCRIPTION

Solenoid valve 2 way normally closed
 direct acting poppet type.
 With explosion proof coil certified for hazardous area:

⊕ II 2GD Ex d IIC T6 or T5 or T4 Gb
 Ex tb IIIC T80°C or T95°C or T130°C Db IP66
 T_{amb} -10°C ÷ +35°C(T6) or +50°C(T5) or +60°C(T4)

(other certifications e.g. Gost-r, Baseefa, CCOE etc. on request)



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VALVE CONSTRUCTION

Body Brass
 Seal material FPM

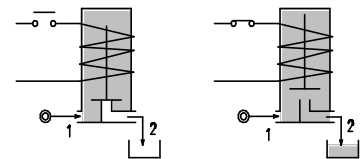
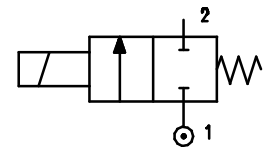
EXPLOSION PROOF CONSTRUCTION

Housing Red colour alloy
 Electrical connection ½" NPT (M20x1,5 on request)

FEATURES

Maximum allowable pressure 80 bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature :-10°C ÷ +35°C(T6), +50°C(T5), +60°C(T4)
 Mounting position with vertical coil above

OPTIONS : Electroless nickel plating
 Stainless steel seat



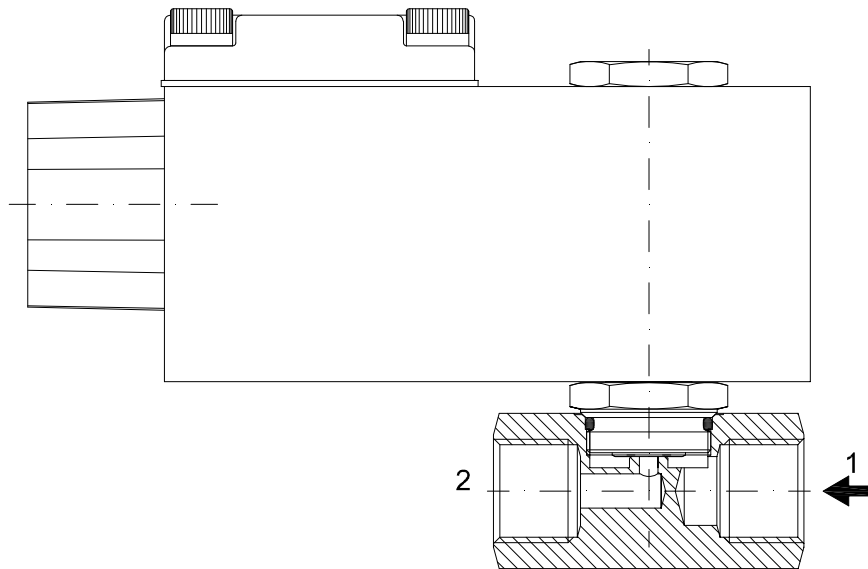
NOTE: The solenoid valve is suitable only with media that are **NOT** potentially explosive.

CODE ①	Connection G ISO 228	Orifice mm	KV m ³ /h	Differential pressure bar			Nominal power		Coil ① Series	Seal	Temperature Range °C
				Min	Max		AC Holding	DC Watt			
					AC	DC					
A106CV30///.....	3/8"	3	0.25	0	15	10	12 VA	8 W	A6	FPM=V	-10 +130
A106CV35///.....		3.5	0.32	0	10	8					
A106CV40///.....		4	0.36	0	8	5					
A106CV45///.....		4.5	0.41	0	6.5	3.5					
A106CV52///.....		5.2	0.47	0	4	1.8					
A106CV64///.....		6.4	0.64	0	3	1					
A106DV30///.....	1/2"	3	0.25	0	15	10	12 VA	8 W	A6	FPM=V	-10 +130
A106DV35///.....		3.5	0.32	0	10	8					
A106DV40///.....		4	0.36	0	8	5					
A106DV45///.....		4.5	0.41	0	6.5	3.5					
A106DV52///.....		5.2	0.47	0	4	1.8					
A106DV64///.....		6.4	0.64	0	3	1					

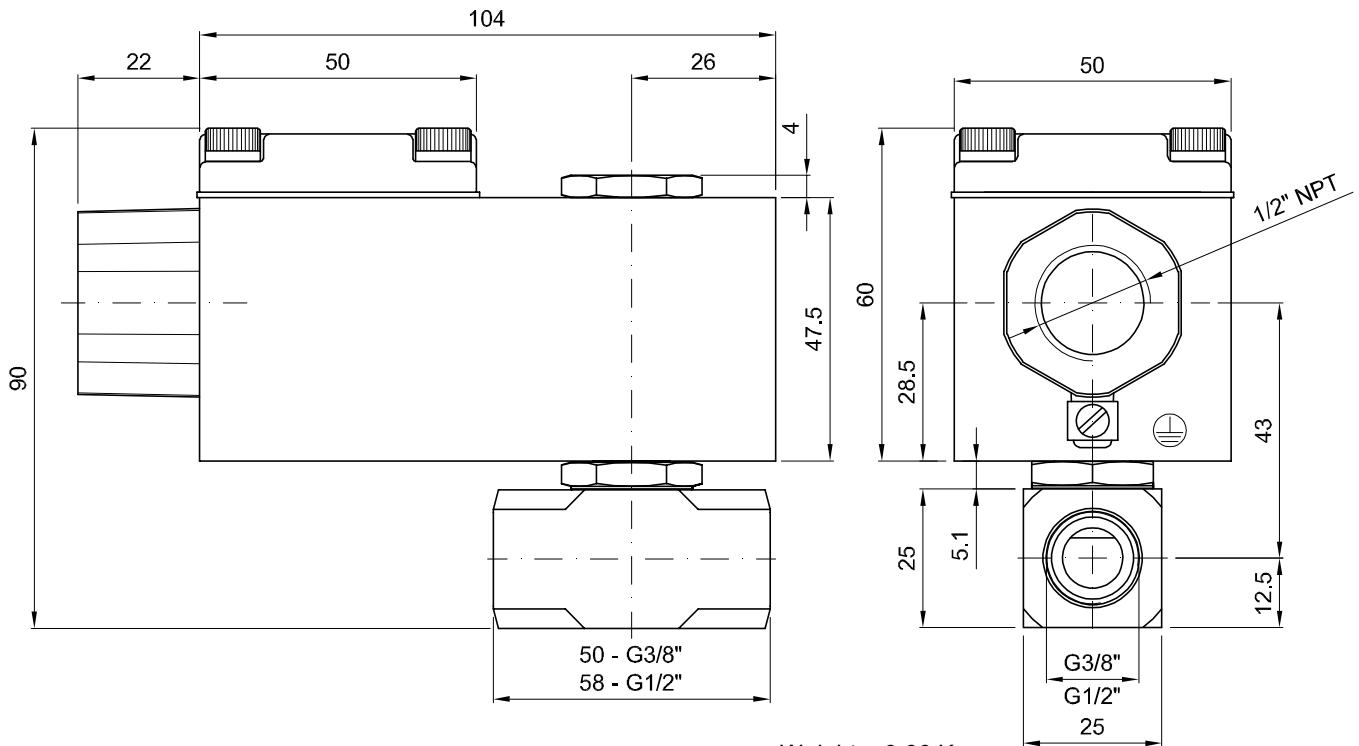
① Coil

COILS	Alternating Current ~50/60Hz Volt				Direct Current Volt			Electrical connection
	24	48	110	220 230	12	24	48	
Series A6 Code ①	A6B	A6C	A6D	A6E	A60	A61	A62	1/2" NPT

DESCRIPTION
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class IP66



OVERALL DIMENSION



DESCRIPTION

Drain valve

CONSTRUCTION

- Solenoid valve series 106 with:
 - Filter ball in chromium plated brass and stainless steel strainer, NBR seal
 - Connection : inlet G1/2", outlet G3/8" or G1/2"
- Timer ACL mod.11303000
- Connector DIN 43650A code 1034900A

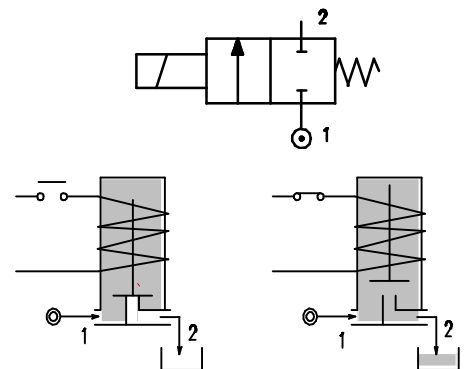


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FEATURES

- Maximum allowable pressure 80 bar
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature :
 - with class F coil -10°C +55°C
 - with class H coil -10°C +80°C
- Protection class IP65

- OPTIONS :** Electroless nickel plating on the valve body
Overmoulded DIN cable connector



CODE ① ②	Connection G ISO 228	Orifice mm	KV m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
S106BV30///.....	1/4"	3	0.18	0	14	6	20	15	10	2	30	FPM=V	-10 +130
S106BV40///.....		4	0.26	0	7	3							
S106C.....30///.....	3/8"	3	0.25	0	15	10	20	15	10	2	30	NBR=B	-10 +90
S106C.....35///.....		3.5	0.32	0	10	8							
S106C.....40///.....		4	0.36	0	8	5							
S106C.....45///.....		4.5	0.41	0	6.5	3.5							
S106D.....30///.....	1/2"	3	0.25	0	15	10	20	15	10	2	30	NBR=B	-10 +90
S106D.....35///.....		3.5	0.32	0	10	8							
S106D.....40///.....		4	0.36	0	8	5							
S106D.....45///.....		4.5	0.41	0	6.5	3.5							
S106C.....30///.....	3/8"	3	0.25	0	25	24	40	30	27	5	36	NBR=B	-10 +90
S106C.....35///.....		3.5	0.32	0	20	19							
S106C.....40///.....		4	0.36	0	16	15							
S106C.....45///.....		4.5	0.41	0	14	13							
S106D.....30///.....	1/2"	3	0.25	0	25	24	40	30	27	5	36	NBR=B	-10 +90
S106D.....35///.....		3.5	0.32	0	20	19							
S106D.....40///.....		4	0.36	0	16	15							
S106D.....45///.....		4.5	0.41	0	14	13							

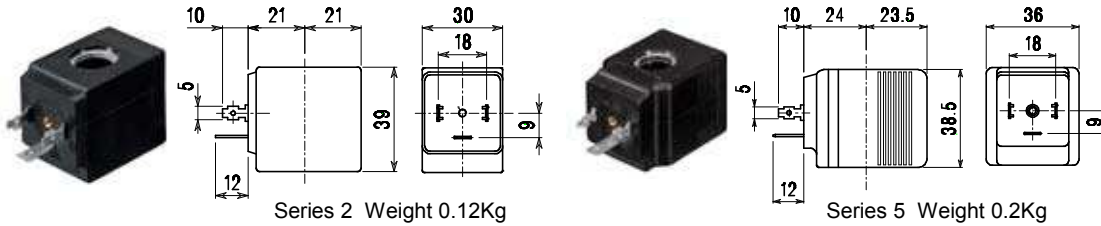
- ① Seal
- ② Coil

Example: S106CB25///201 NBR seal
Coil 24V DC

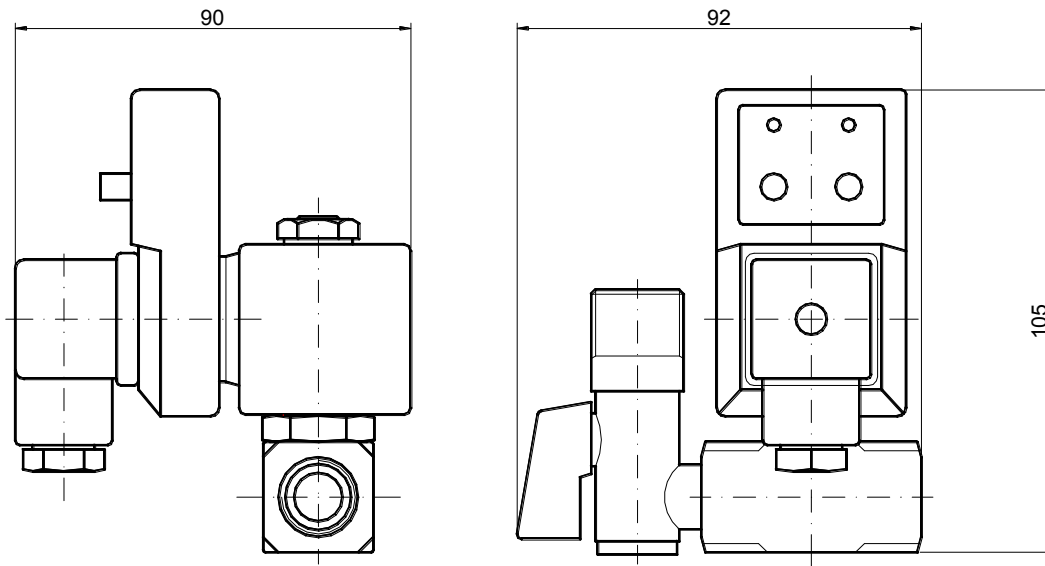
COILS	Alternating Current ~50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36 Code ②	52A	52B	52C	52D	52E	52F	52G	521	521	522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

DESCRIPTIONS
 Insulation class
 Series 2=F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation (series 2)
 Cable attached
 Special coil voltages
 Special coil powers



OVERALL DIMENSION



Weight with coil series 2 = 0.52 Kg
 Weight with coil series 5 = 0.60 Kg

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

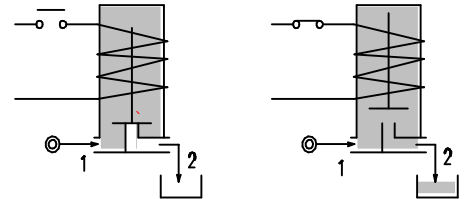
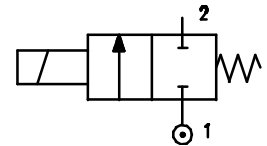
Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	FPM



2

FEATURES

Maximum allowable pressure 50 bar *
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature : with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



CODE ②	Connection G ISO 228	Orifice mm	KV m ³ /h	Differential pressure bar			Nominal power			Coil		Seal	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
W106BV30///.....	1/4"	3	0.18	0	14	6	20	15	10	2	30	FPM=V	-10 +130
W106BV40///.....		4	0.26	0	7	3							

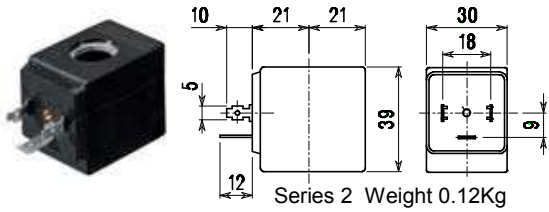
② Coil

* REMARK: The maximum allowable pressure PS for steam is 2,5bar (gauge pressure)

COIL	Alternating Current ~50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000

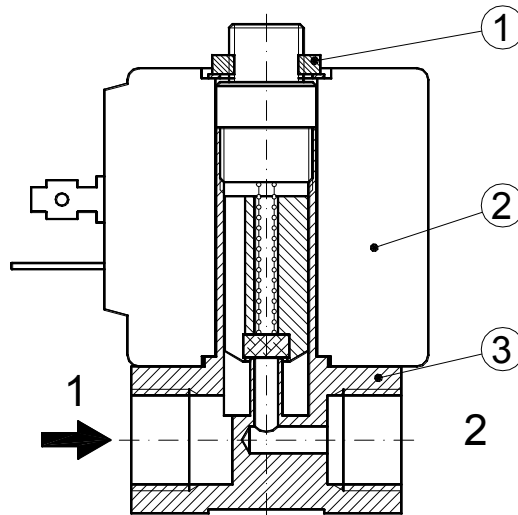
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector mounted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltages
 Special coil powers

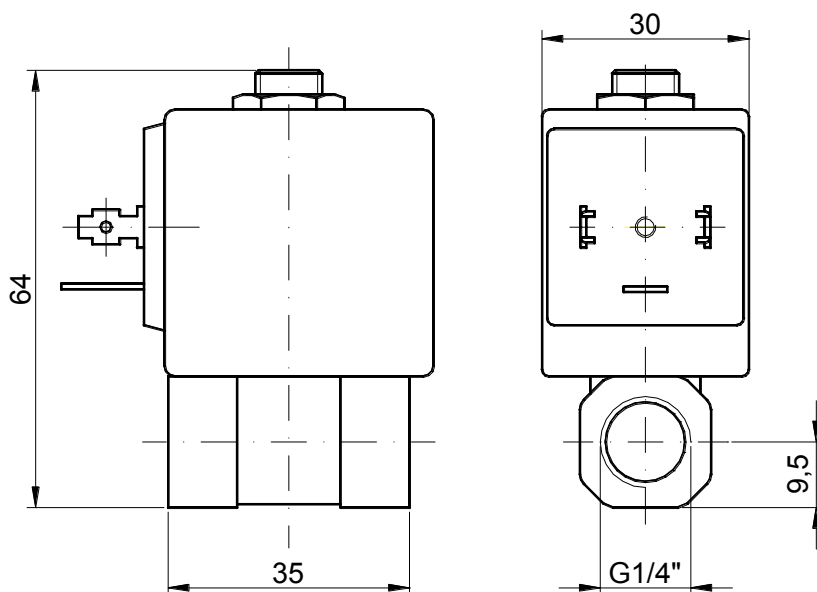


SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Valve



OVERALL DIMENSION



Weight = 0.22 Kg

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

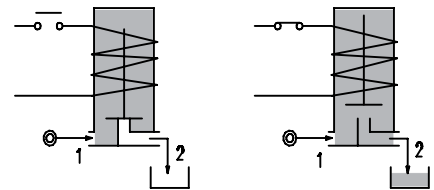
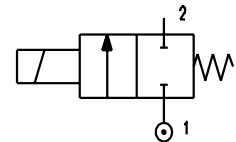
Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM



2

FEATURES

Maximum allowable pressure 5bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS: Electroless nickel plating
Version for use with oxygen

CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Temp. range °C	
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		Seal ①
E109C...12///...	3/8"	12	2	0	0.5	0.06	20	15	10	2	30	NBR=B	-10 +90
E109D...12///...	1/2"	12	2.2	0	0.5	0.06							
E109E...18///...	3/4"	18	4.5	0	0.14	--	20	15	--	5	36	EPDM=E	-10 +140
E109C...12///...	3/8"	12	2	0	0.8	0.4							
E109D...12///...	1/2"	12	2.2	0	0.8	0.4	40	30	27	5	36	FPM=V	-10 +130
E109E...18///...	3/4"	18	4.5	0	0.2	0.12							

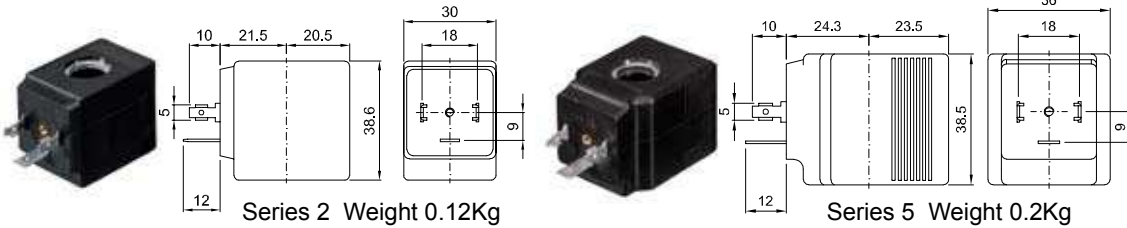
- ① Seal
- ② Coil

Example: E109EV18///52B FPM seal
Coil 24V 50/60Hz

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36 Code ②	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
 Continuous service ED100%

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

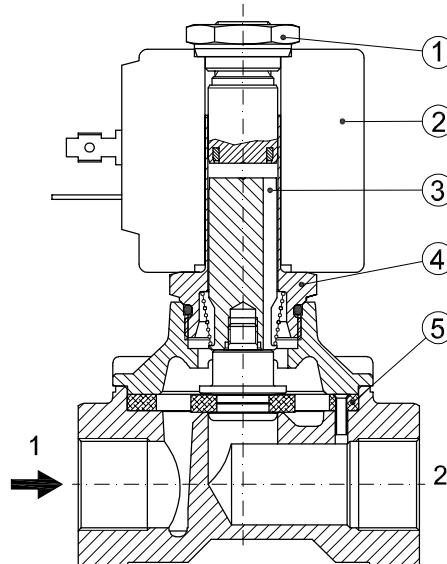


Series 2 Weight 0.12Kg

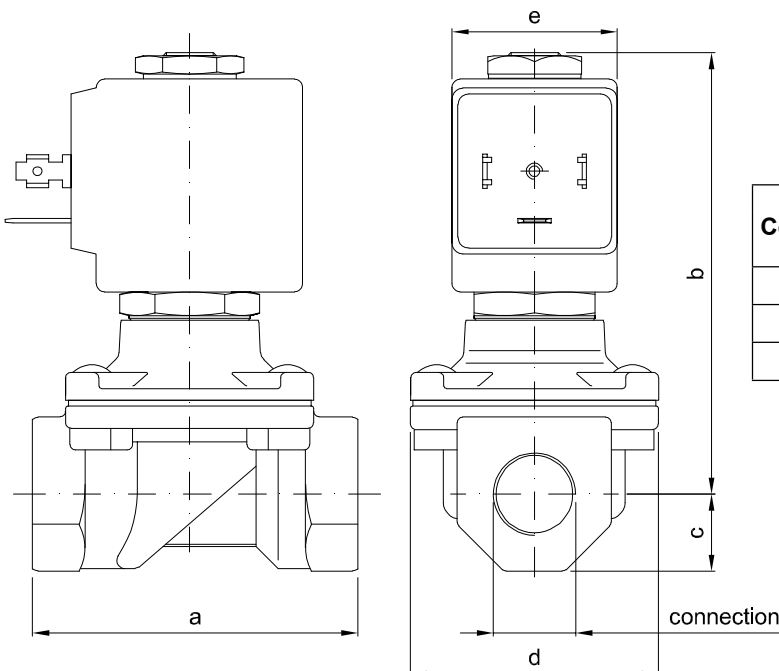
Series 5 Weight 0.2Kg

SPARE PARTS LIST

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



OVERALL DIMENSION



Connection	a	b	c	d	e		Weight kg	
					with series 2	with series 5	series 2	series 5
G3/8"	60	83	14	45	30	36	0.50	0.58
G1/2"	60	83	14	45	30	36	0.45	0.53
G3/4"	75	90	18	55	30	36	0.75	0.83

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

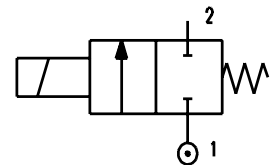
Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR - FPM - EPDM



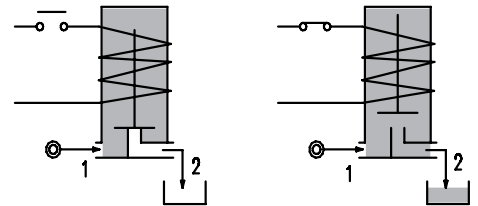
2

FEATURES

Maximum allowable pressure 50bar*
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS: Stainless steel armature tube
 Electroless nickel plating
 Series 7 explosion proof coil according to ATEX - EExmII
 US certified coils



CODE ① ②	Flange □ 25	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E112X...12///...	□ 25	1.2	0.04	0	25	25	12	8	6,5	3	22	NBR=B EPDM=E FPM=V	-10 +90 -10 +140 -10 +140
E112X...15///...		1.5	0.06	0	16	16							
E112X...20///...		2	0.09	0	12	10							
E112X...25///...		2.5	0.14	0	8	5.5							
E112X...20///...	□ 25	2	0.09	0	25	15	15	11	5	4	30	NBR=B EPDM=E FPM=V	-10 +90 -10 +140 -10 +140
E112X...25///...		2.5	0.14	0	16	8							

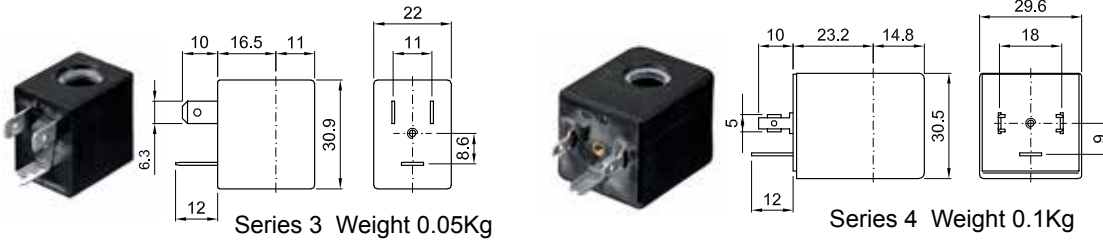
① Seal Example: E112XB20///30B NBR seal
 ② Coil Coil 24V 50/60Hz

* REMARK: The maximum allowable pressure PS for steam is 2,5bar

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000
Series 4 Width 30 Code ②	40A	40B	40C	40D	40E	40F	40G	400	401	402	DIN 43650A	PG9 code 10349000

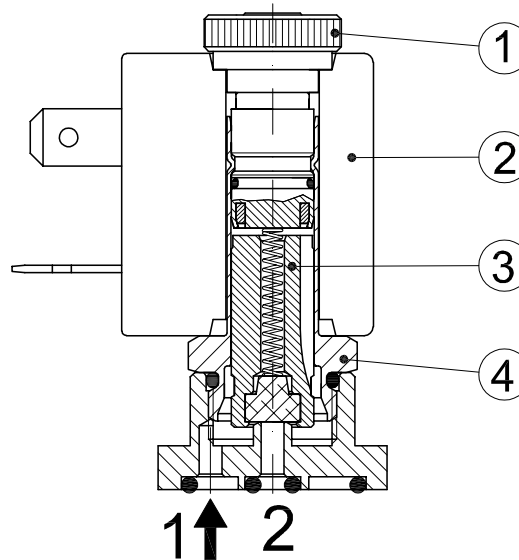
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service
 ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers
 us certified coils

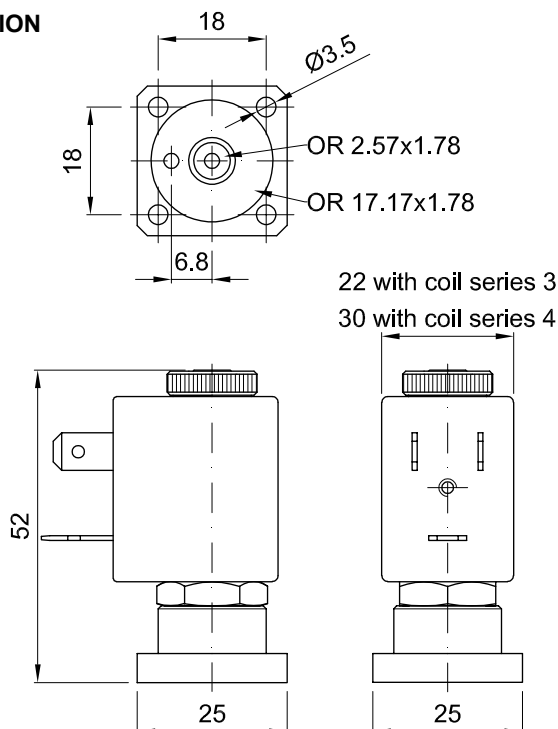


SPARE PARTS LIST

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



OVERALL DIMENSION



Weight with coil series 3=0.12Kg
 Weight with coil series 4=0.17Kg

DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

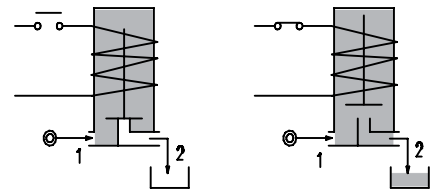
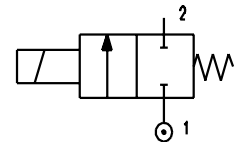
Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM PTFE



2

FEATURES

Maximum allowable pressure 50bar*
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS: Manual override
 Electroless nickel plating
 Stainless steel seat insert
 Version for use with oxygen

CODE ① ②	Flange	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E114X...15///...	Q32	1.5	0.07	0	30	26	20	15	10	2	30	NBR=B	-10 +90
E114X...20///...		2	0.1	0	22	20							
E114X...25///...		2.5	0.15	0	16	14							
E114X...35///...		3.5	0.32	0	10	8							
E114X...45///...		4.5	0.41	0	6.5	3.5							
E114X...25///...	Q32	2.5	0.15	0	35	33	40	30	27	5	36	FPM=V	-10 +130
E114X...35///...		3.5	0.32	0	20	19							
E114X...45///...		4.5	0.41	0	14	13							

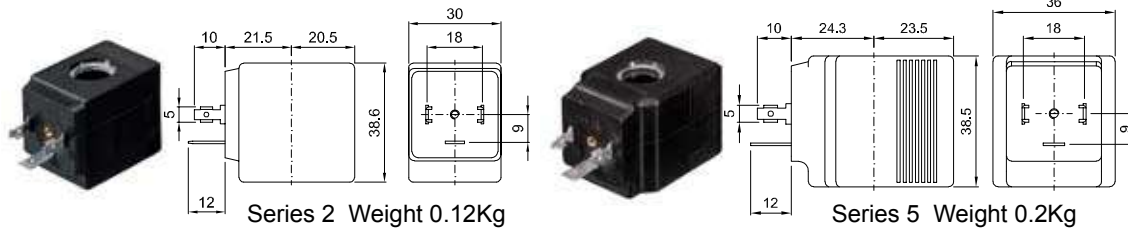
① Seal Example: E114XB25///20E NBR seal
 ② Coil Coil 230V 50/60Hz

* REMARK: The maximum allowable pressure PS for steam is 6bar with PTFE seals and 2,5bar with EPDM seals

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

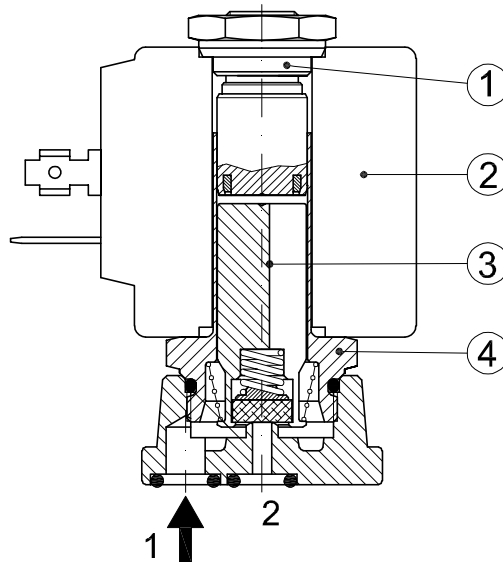
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

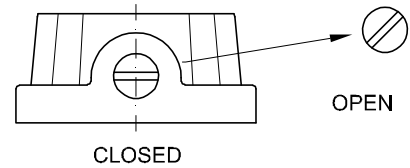


SPARE PARTS LIST

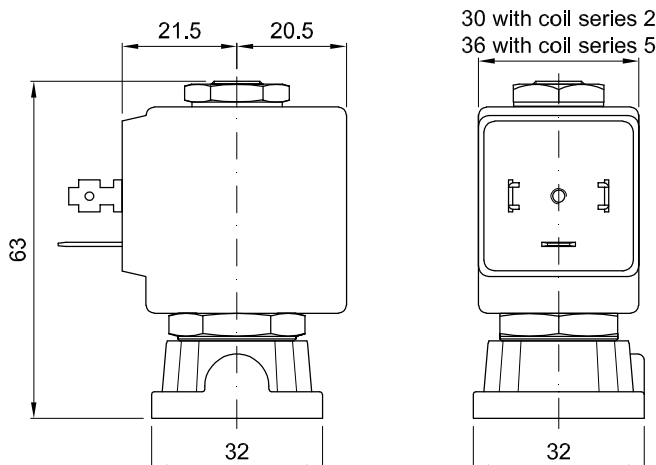
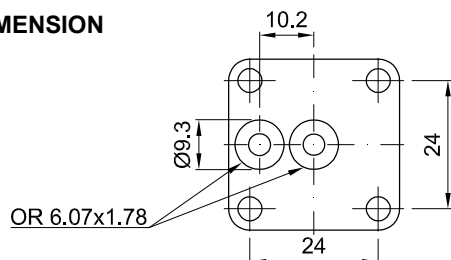
1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core



MANUAL OVERRIDE



OVERALL DIMENSION



Weight with coil series 2=0.24Kg
 Weight with coil series 5=0.32Kg

DESCRIPTION

Solenoid valve 2 way direct acting poppet type.
 Bi-stable impulse drive.
 The bi-stable function is achieved by the use of a polarized permanent magnet energizing the coil with a DC current for at least 15ms in the reverse direction of the preceding impulse.



2

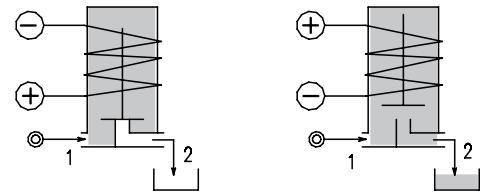
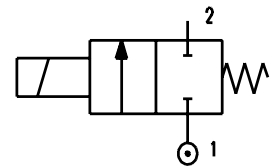
CONSTRUCTION

Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Magnet	NeFeB
Springs	Stainless steel
Seal material	NBR - FPM - EPDM

FEATURES

Maximum allowable pressure 50bar*
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position

OPTIONS: Stainless steel armature tube
 Electroless nickel plating
 Series 7 explosion proof coil according to ATEX - EExmII
 Special powers



CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar		Nominal power DC Watt	Coil		Seal ①	Temp. range °C		
				Min	Max		Series	Width				
D115A...12///...	1/8"	1.2	0.04	0	12	2	3	22	NBR=B	-10 +90		
D115A...15///...	1/8"	1.5	0.06	0	8	2						
		1.5	0.06	0	20	5						
D115A...20///...	1/8"	2	0.09	0	3	2						
		2	0.09	0	12	5						
D115A...25///...	1/8"	2.5	0.14	0	1	2						
		2.5	0.14	0	5	5						
		2.5	0.14	0	8	6.5						
D115A...31///...	1/8"	3.1	0.19	0	2	5						
		3.1	0.19	0	3.5	6.5						
											EPDM=E	-10 +140
											FPM=V	-10 +140

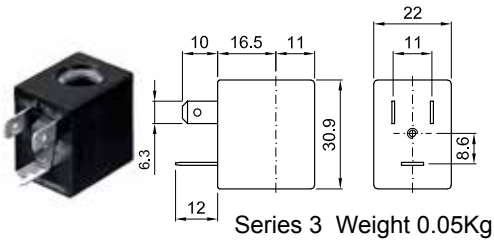
- ① Seal
- ② Coil

Example: D115AB20///300120 NBR seal
 Coil 12V DC 2W

COILS	Direct Current															Electrical connection	Connectors
	3V			6V			9V			12V			24V				
	2W	5W	6.5W	2W	5W	6.5W	2W	5W	6.5W	2W	5W	6.5W	2W	5W	6.5W		
Series 3 Width 22 Code ②	308120			305120	305150		307120	307150		300120	300150	300	301120	301150	301	DIN 46244	PG9 code 10348000

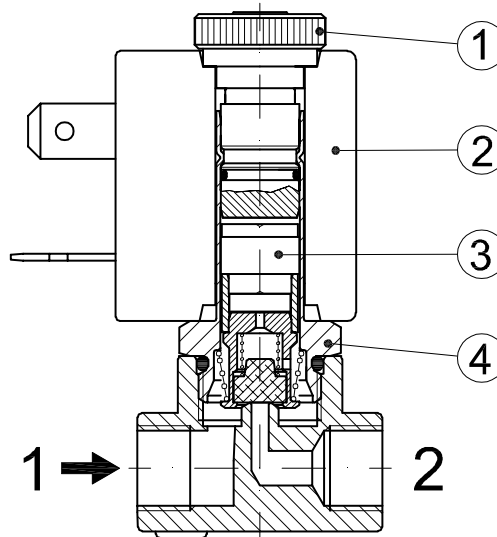
DESCRIPTION
 Class F insulation
 Voltage tolerance $\pm 10\%$
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

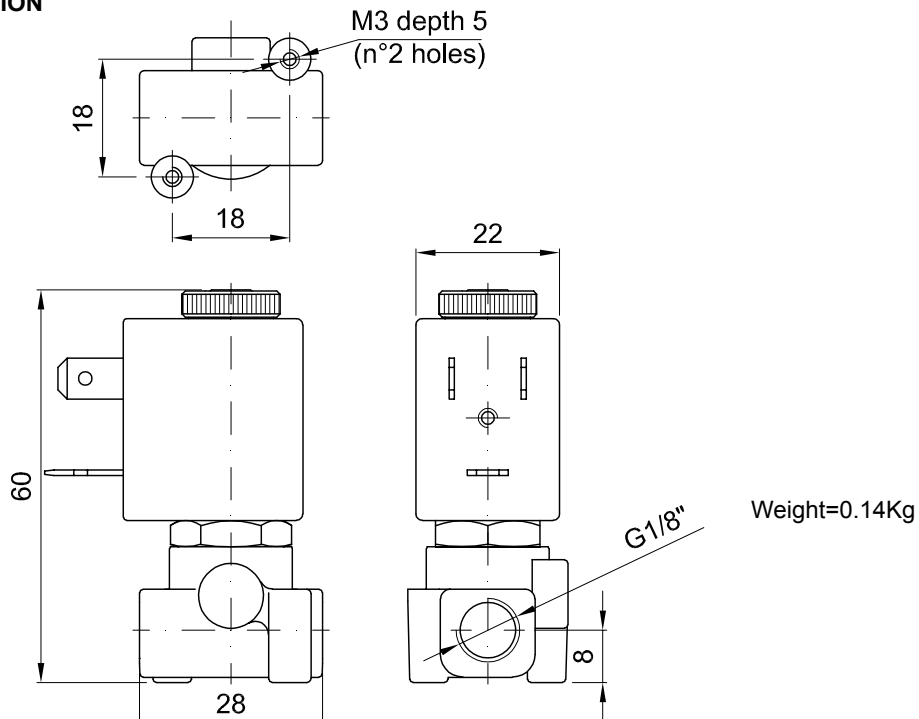


SPARE PARTS LIST

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



OVERALL DIMENSION



DESCRIPTION

Solenoid valve 2 way direct acting poppet type . Bi-stable impulse drive. The bi-stable function is achieved by the use of a polarised permanent magnet energising the coil with a DC current for at least 15ms in the reverse direction of the preceding impulse.



2

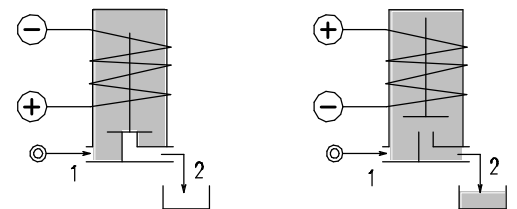
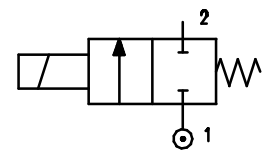
CONSTRUCTION

Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Magnet	NeFeB
Springs	Stainless steel
Seal	NBR
	FPM
	EPDM

FEATURES

Maximum allowable pressure 50 bar *
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature : with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position

OPTIONS : Stainless steel seat insert
 Electroless nickel plating
 Special powers



CODE ① ②	Connection G ISO 228	Orifice mm	KV m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
D116A.....15///.....	1/8"	1.5	0.07	0	-	26	-	-	10	2	30	NBR=B -10 +90	
D116A.....20///.....		2	0.1	0	-	20							
D116A.....25///.....		2.5	0.15	0	-	14							
D116A.....35///.....		3.5	0.32	0	-	8							
D116B.....15///.....	1/4"	1.5	0.07	0	-	26							
D116B.....20///.....		2	0.1	0	-	20							
D116B.....25///.....		2.5	0.15	0	-	14							
D116B.....35///.....		3.5	0.32	0	-	8							
D116B.....45///.....		4.5	0.41	0	-	3.5							
D116B.....52///.....		5.2	0.47	0	-	1.8							
D116C.....30///.....	3/8"	3	0.25	0	-	10							
D116C.....35///.....		3.5	0.32	0	-	8							
D116C.....40///.....		4	0.36	0	-	5							
D116C.....45///.....		4.5	0.41	0	-	3.5							
D116C.....52///.....		5.2	0.47	0	-	1.8							
D116D.....30///.....	1/2"	3	0.25	0	-	10							
D116D.....35///.....		3.5	0.32	0	-	8							
D116D.....40///.....		4	0.36	0	-	5							
D116D.....45///.....		4.5	0.41	0	-	3.5							
D116D.....52///.....		5.2	0.47	0	-	1.8							

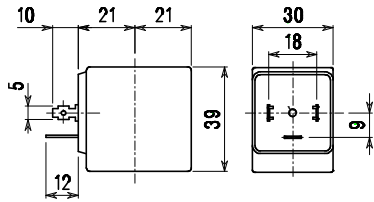
① Seal Example: D116BB25///201 NBR seal
 ② Coil Coil 24V DC

* REMARK: The maximum allowable pressure PS for steam is 2,5 bar (gauge pressure) with EPDM seals

COIL	Direct Current Volt			Electrical connection	Connectors
	12	24	48		
Series 2 Width 30 Code ②	200	201	202	DIN 43650A	PG9 code 10349000

DESCRIPTION
 Insulation class F
 Voltage tolerance $\pm 10\%$
 Protection class
 IP65 with connector fitted
 IP00 without connector

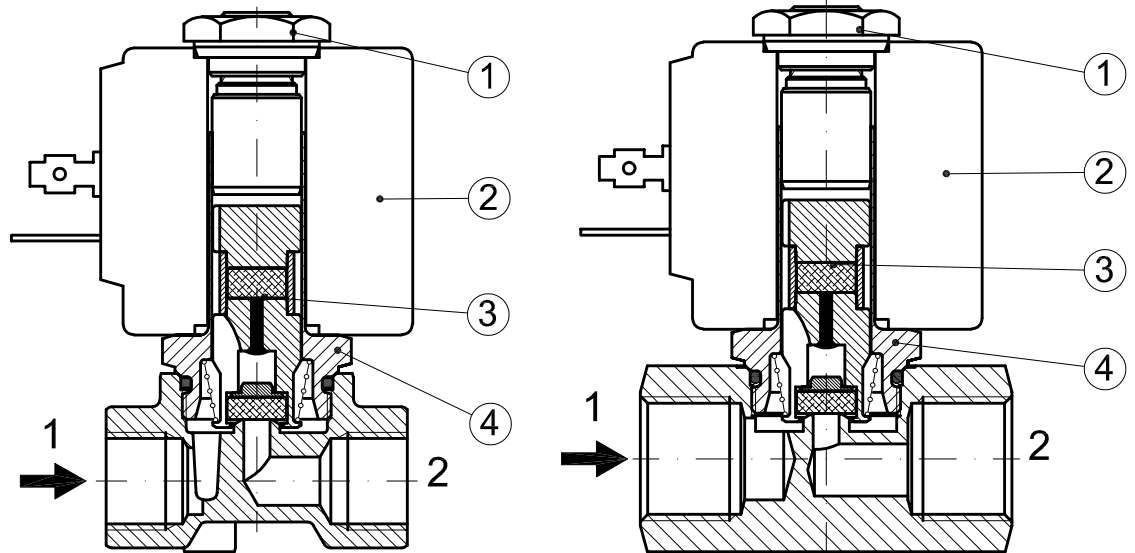
OPTIONS
 Class H insulation
 Cable attached
 Special coil voltages
 Special coil powers



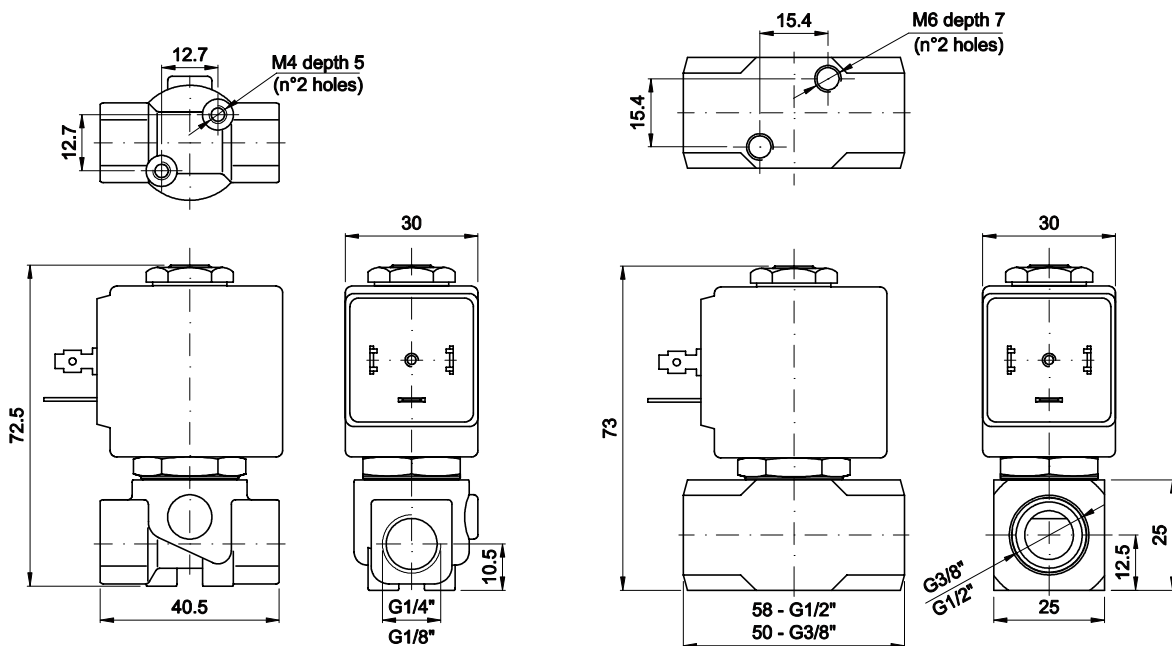
Series 2 Weight 0.12Kg

SPARE PARTS LIST

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



OVERALL DIMENSION



DESCRIPTION

Solenoid valve 2 way normally closed
direct acting poppet type

CONSTRUCTION

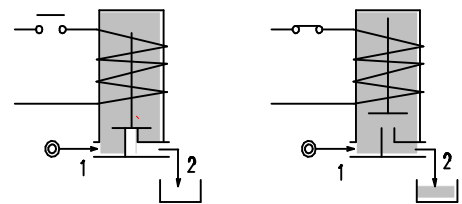
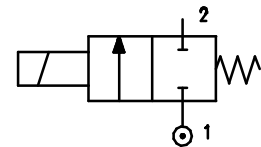
Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM



2

FEATURES

Maximum allowable pressure 30 bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature : with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS : Electroless nickel plating

CODE ① ②	Connection	Orifice mm	KV m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. Range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
D121L.....10///.....	M5	1	0.03	0	-	10	-	-	2	6	16	NBR=B	-10 +90
D121L.....12///.....		1.2	0.037	0	-	7	-	-	2				
D121L.....12///.....		1.2	0.037	0	-	12	-	-	4				
D121L.....16///.....		1.6	0.055	0	-	3	-	-	2				
D121L.....16///.....		1.6	0.055	0	-	8	-	-	4			FPM=V	-10 +130
D121L.....20///.....		2	0.082	0	-	1.4	-	-	2				
D121L.....20///.....		2	0.082	0	-	4	-	-	4				

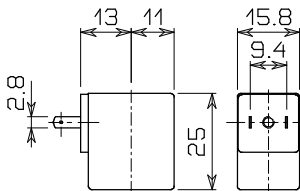
- ① Seal
- ② Coil

Example: D121LV12///60112 FPM seal
Coil 24V DC 2W

COIL	Direct Current				Electrical connection	Connectors
	12V		24V			
	2W	4W	2W	4W		
Series 6 Width 16 Code ②	60012	60014	60112	60114	AMP 2.8X0.5	PG7 10348040

DESCRIPTION
 Class F insulation
 Voltage tolerance $\pm 5\%$
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

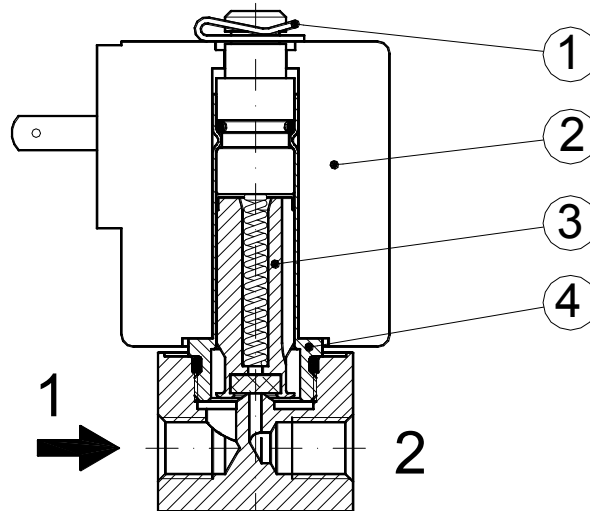
OPTIONS
 Cable attached
 Special coil voltages
 Special coil powers



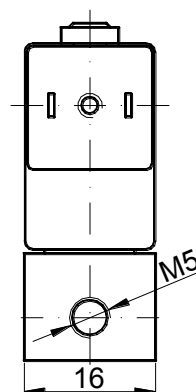
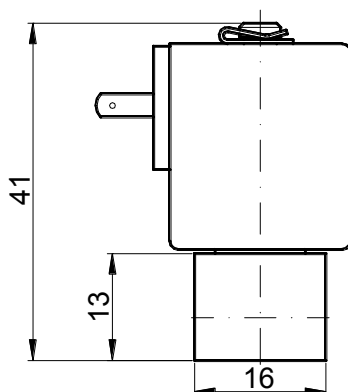
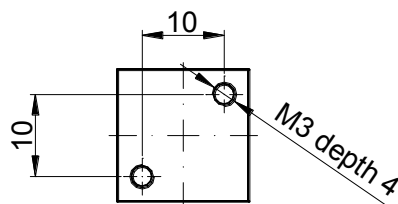
Series 6 Weight 0.02Kg

SPARE PARTS LIST

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



OVERALL DIMENSION



Weight = 0.05 Kg

DESCRIPTION

Solenoid valve 2 way normally open
direct acting poppet type

CONSTRUCTION

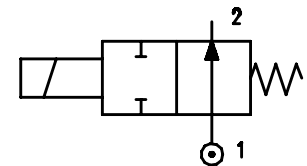
Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR
	FPM
	EPDM



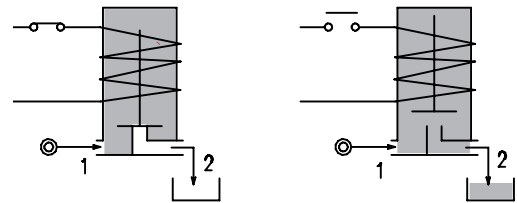
2

FEATURES

Maximum allowable pressure 50bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS: Electroless nickel plating



CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Temp. range °C	
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		Seal ①
					AC	DC							
E203A...20///...	1/8"	2	0.1	0	16	16	20	15	10	2	30	NBR=B	-10 +90
E203A...25///...		2.5	0.14	0	13	13						EPDM=E	-10 +140
E203A...29///...		2.9	0.17	0	10	10						FPM=V	-10 +130

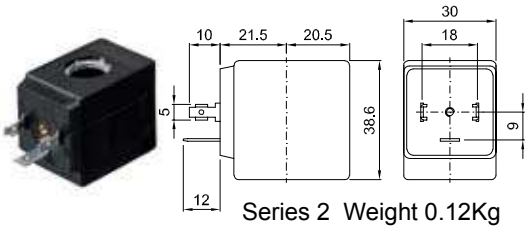
- ① Seal
- ② Coil

Example: E203AV25///20E FPM seal
Coil 230V 50/60Hz5bar with EPDM seals

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000

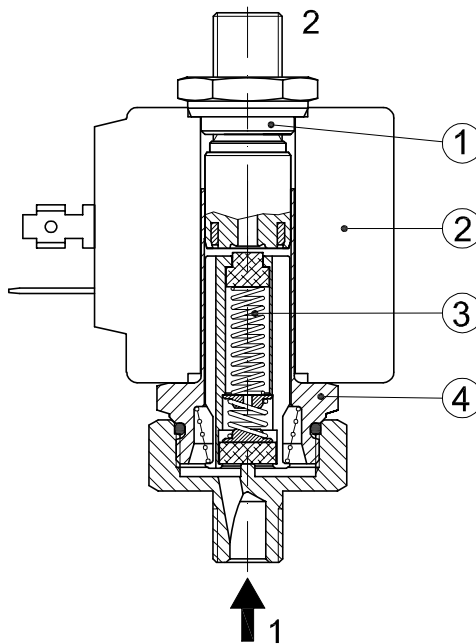
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

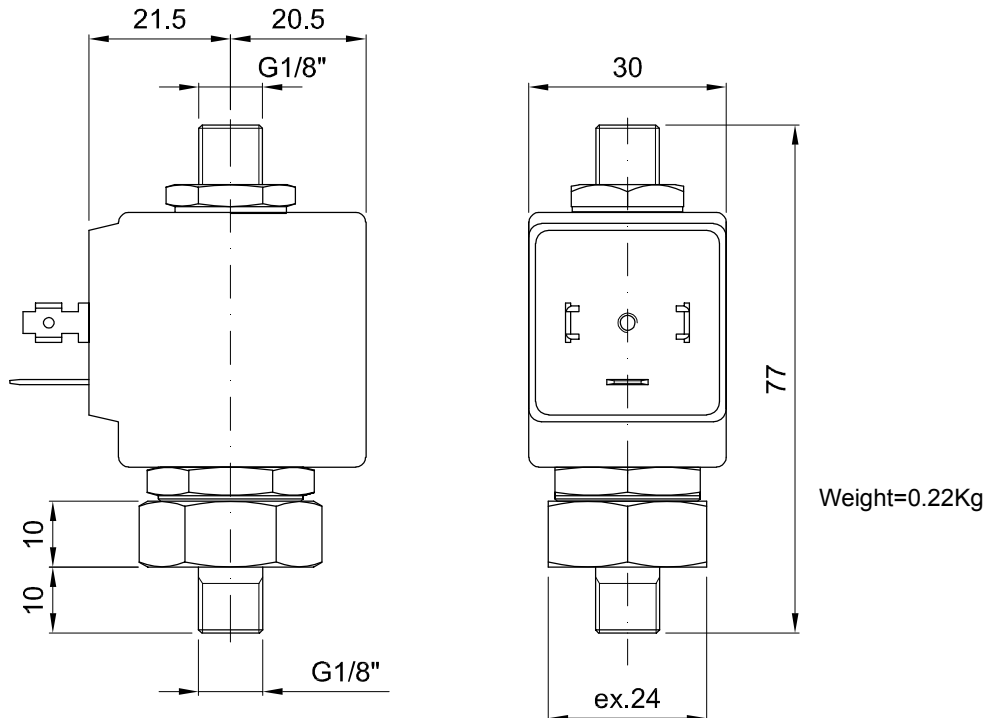


SPARE PARTS LIST

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



OVERALL DIMENSION



DESCRIPTION

Solenoid valve 2 way normally open
direct acting poppet type

CONSTRUCTION

Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR
	FPM
	EPDM

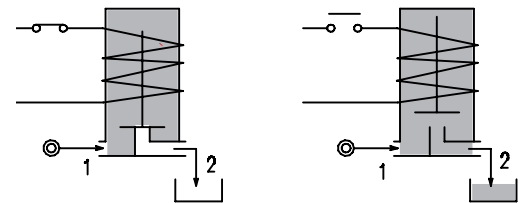
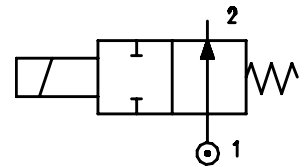


2

FEATURES

Maximum allowable pressure: max working pressure +10%
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position

OPTIONS: Stainless steel armature tube
 Electroless nickel plating
 Explosion proof coil according to ATEX - EExmII Series 7
 User port with hosetail connection



CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
User port with M5 connection													
E204A...15///...	1/8"	1.5	0.06	0	16	16	12	8	6.5	3	22	NBR=B	-10 +90
E204A...17///...		1.7	0.08	0	12	12							
User port with hosetail connection													
E204A...15/1/...	1/8"	1.5	0.06	0	16	16	12	8	6.5	3	22	EPDM=E	<+140
E204A...17/1/...		1.7	0.08	0	12	12							
User port with hosetail connection and relief valve													
E204A...15/3/...	1/8"	1.5	0.06	0	16	16	12	8	6.5	3	22	FPM=V	-10 +130
E204A...17/3/...		1.7	0.08	0	12	12							

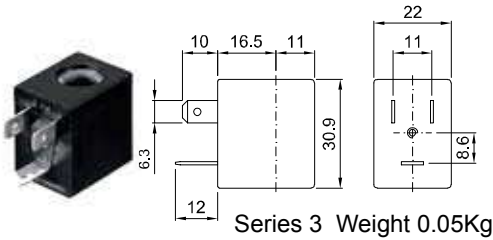
① Seal
 ② Coil

Example: E204AB17///301 NBR seal
 Coil 24V DC

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

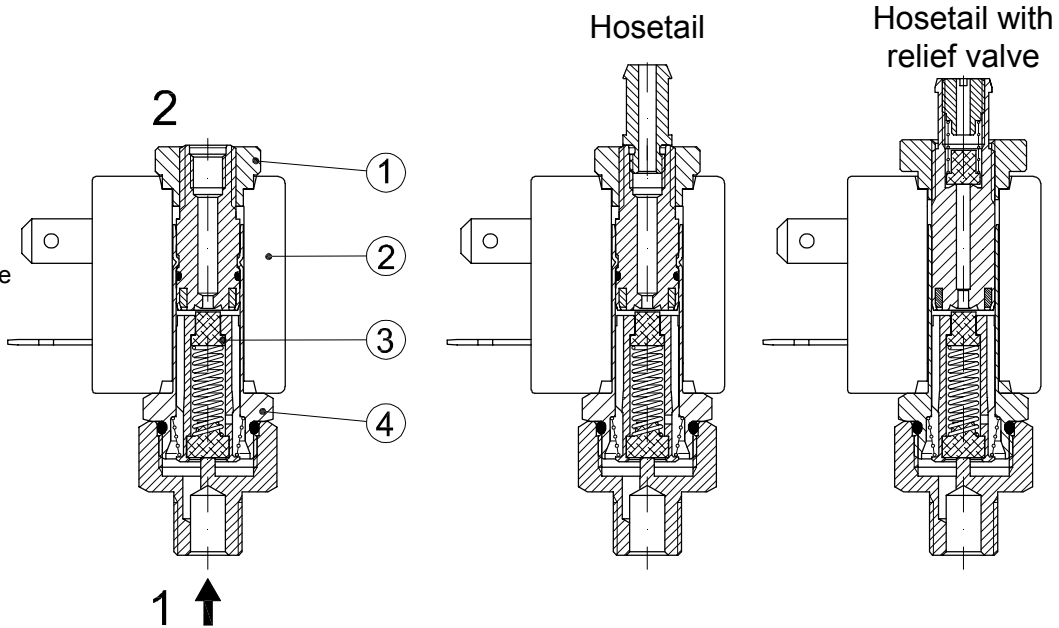
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

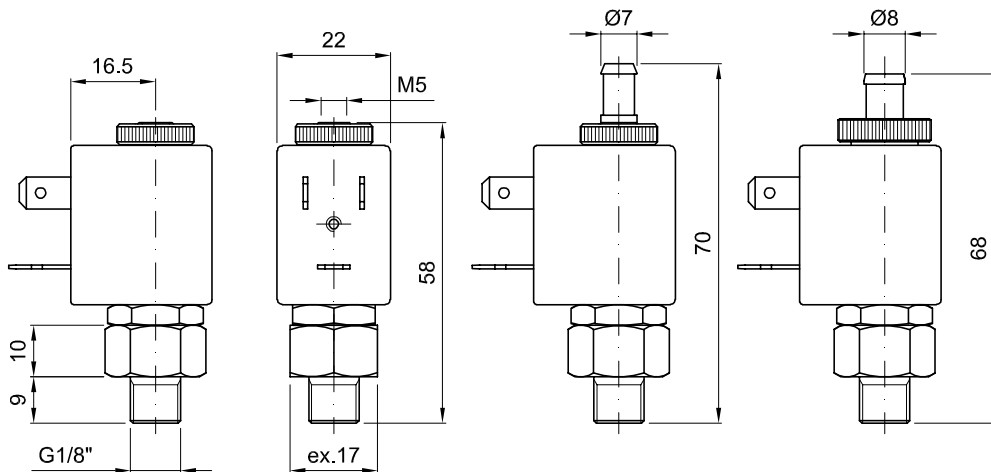


SPARE PARTS LIST

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



OVERALL DIMENSION

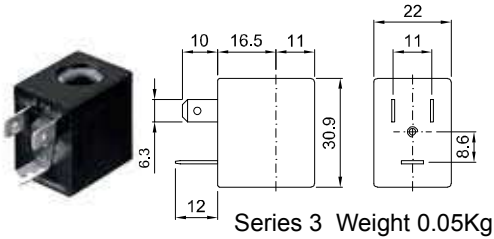


Weight with coil series 3=0.13Kg
 Weight with coil series 4=0.18Kg

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

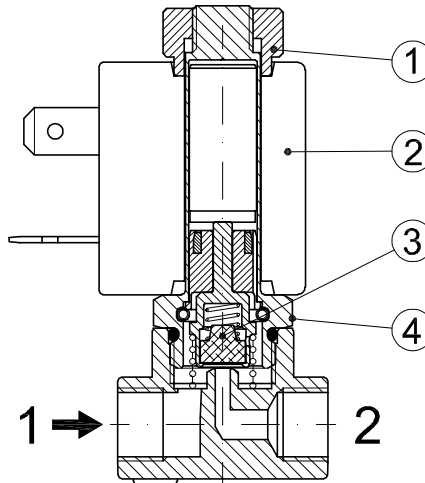
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

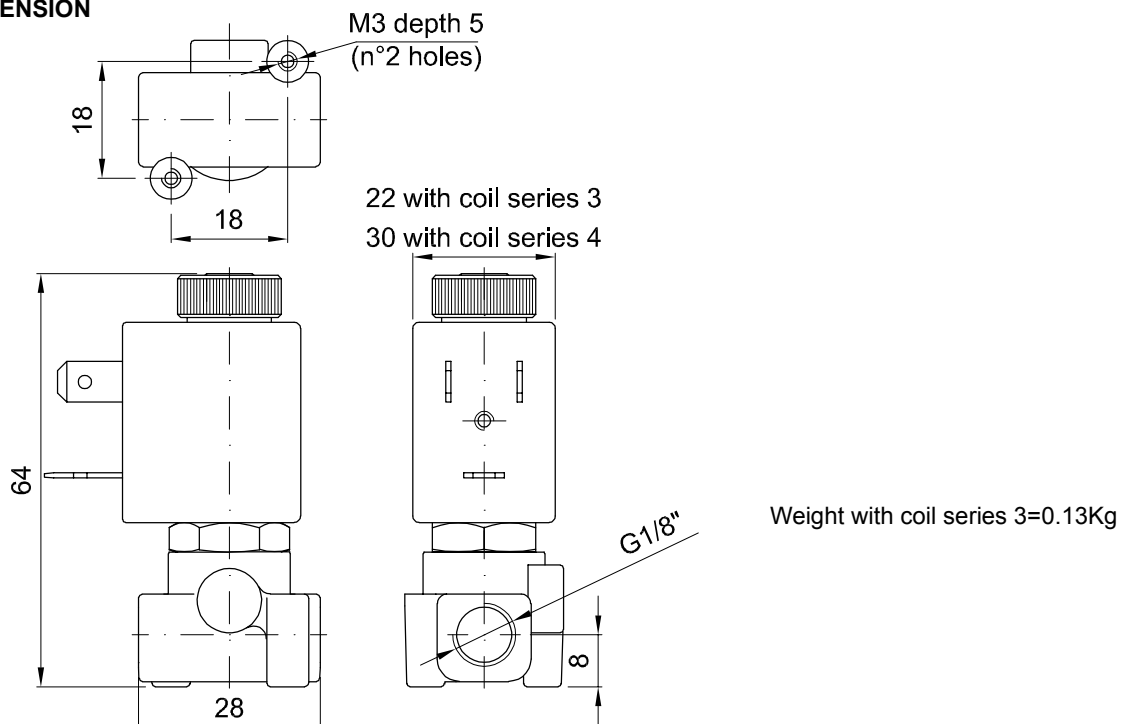


SPARE PARTS LIST

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



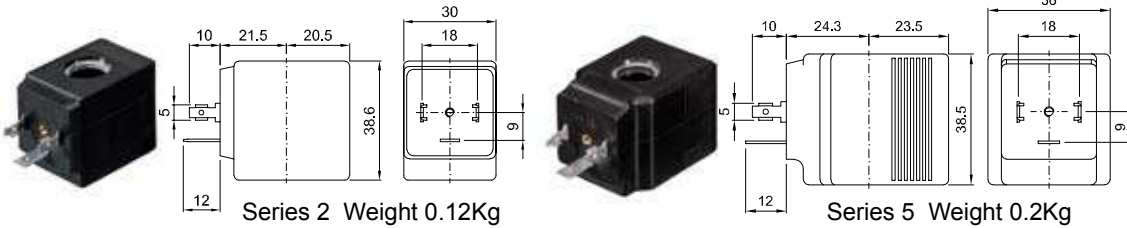
OVERALL DIMENSION



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

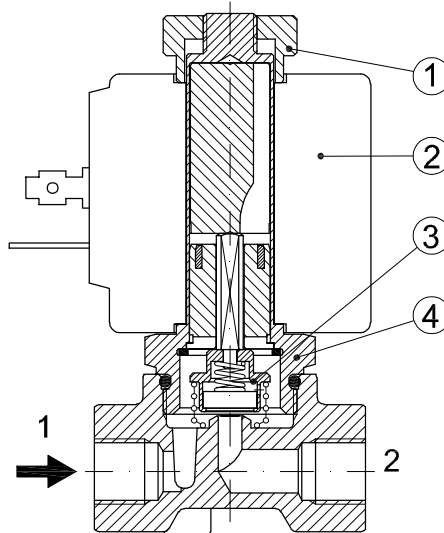
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

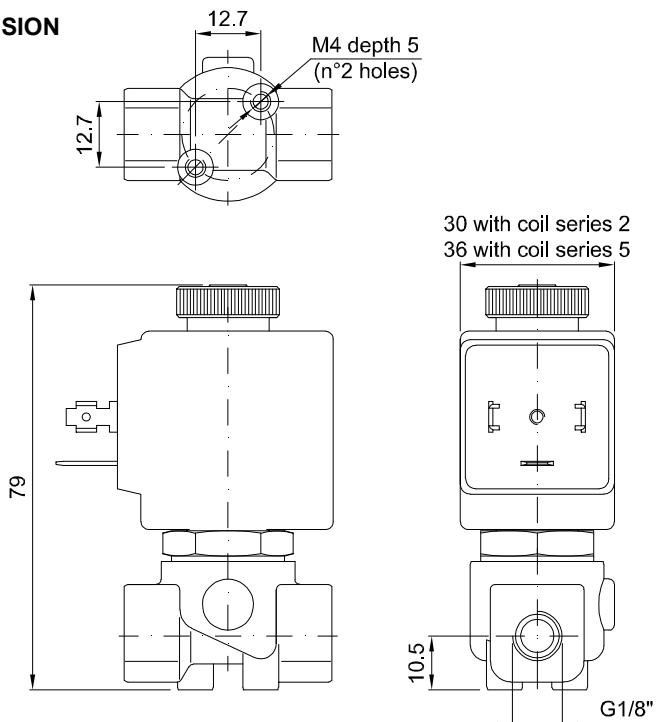


SPARE PARTS LIST

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



OVERALL DIMENSION



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

DESCRIPTION

Solenoid valve 2 way normally open
direct acting poppet type

CONSTRUCTION

Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM

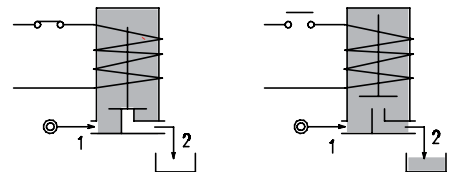
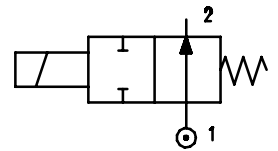


2

FEATURES

Maximum allowable pressure 50bar*
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position

OPTIONS: Stainless steel armature tube
 Electroless nickel plating



CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C		
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width				
					AC	DC									
E206B...15///...	1/4"	1.5	0.07	0	23	-	20	15	-	2	30	NBR=B EPDM=E FPM=V	-10 +90		
E206B...20///...		2	0.1	0	17	-									
E206B...25///...		2.5	0.15	0	12	-									
E206B...35///...		3.5	0.32	0	7	-									
E206B...45///...		4.5	0.41	0	4.5	-									
E206B...52///...		5.2	0.47	0	3	-									
E206B...15///...	1/4"	1.5	0.07	0	23	23	40	30	27	5	36			NBR=B EPDM=E FPM=V	-10 +90
E206B...20///...		2	0.1	0	17	17									
E206B...25///...		2.5	0.15	0	12	12									
E206B...35///...		3.5	0.32	0	7	7									
E206B...45///...		4.5	0.41	0	4.5	4.5									
E206B...52///...		5.2	0.47	0	3	3									
E206B...64///...	6.4	0.64	0	3.5	3.5	-	-	10	2	30	NBR=B EPDM=E FPM=V	-10 +140			
D206B...15/3/...	1.5	0.07	0	-	18										
D206B...20/3/...	2	0.1	0	-	11										
D206B...25/3/...	2.5	0.15	0	-	7										
D206B...35/3/...	3.5	0.32	0	-	4										
D206B...45/3/...	4.5	0.41	0	-	3										
D206B...52/3/...	5.2	0.47	0	-	2.2										

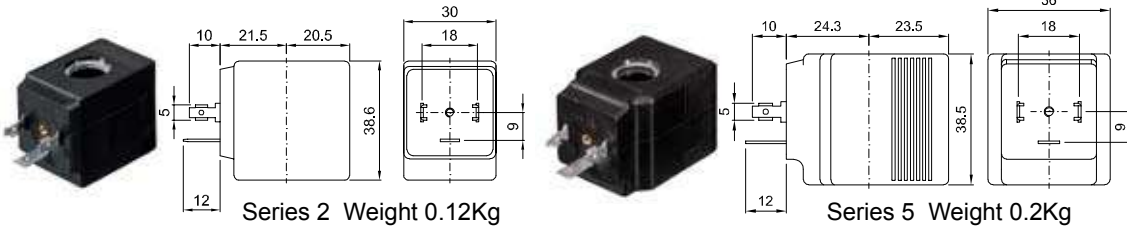
① Seal Example: E206BB35///20E NBR seal
 ② Coil Coil 230V 50/60Hz

* REMARK: The maximum allowable pressure PS for steam is 2,5bar (gauge pressure)

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

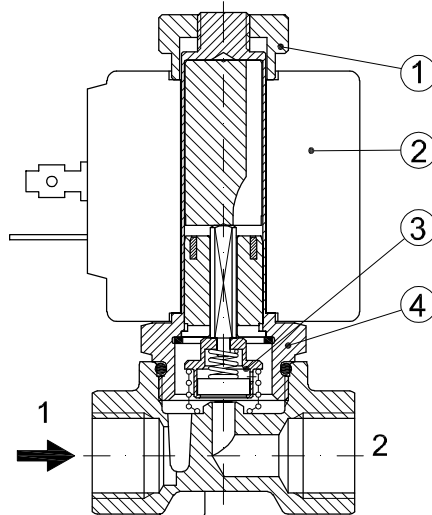
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

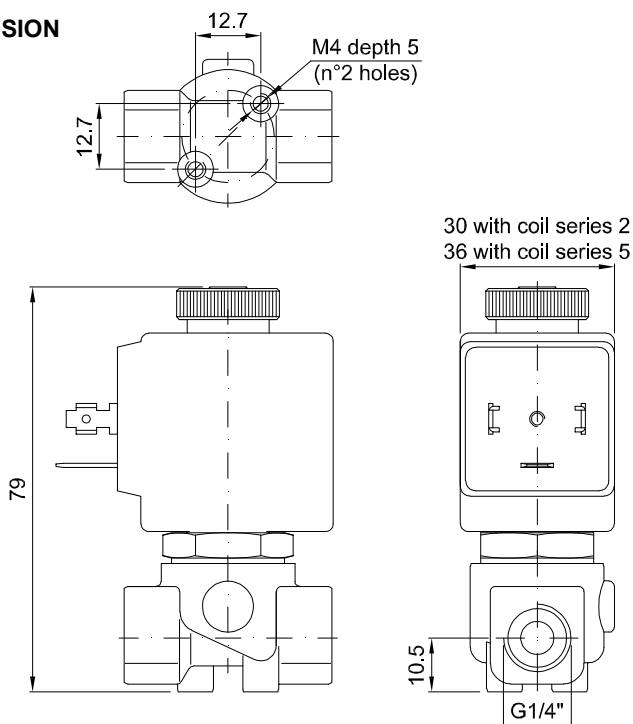


SPARE PARTS LIST

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



OVERALL DIMENSION

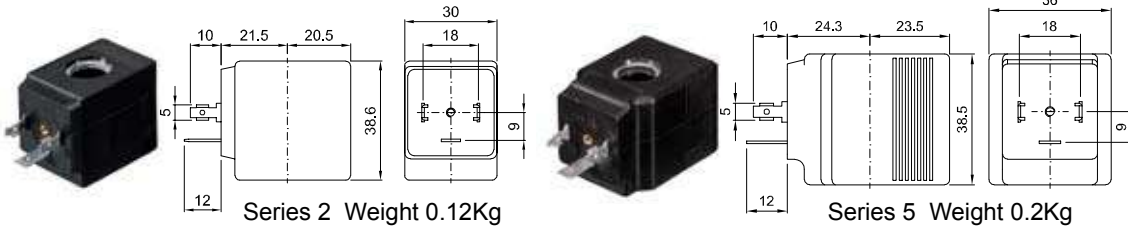


Weight with coil series 2=0.30Kg
 Weight with coil series 5=0.38Kg

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

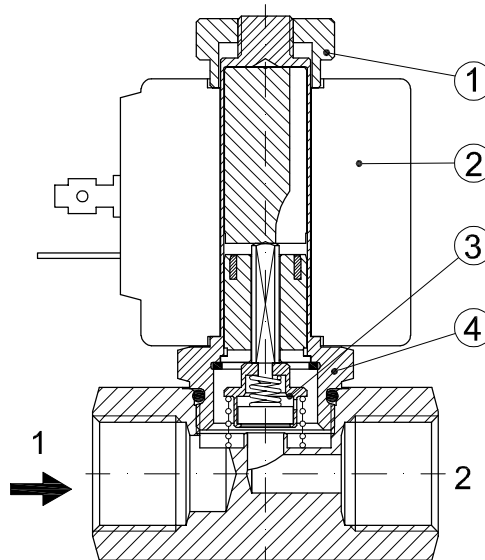
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

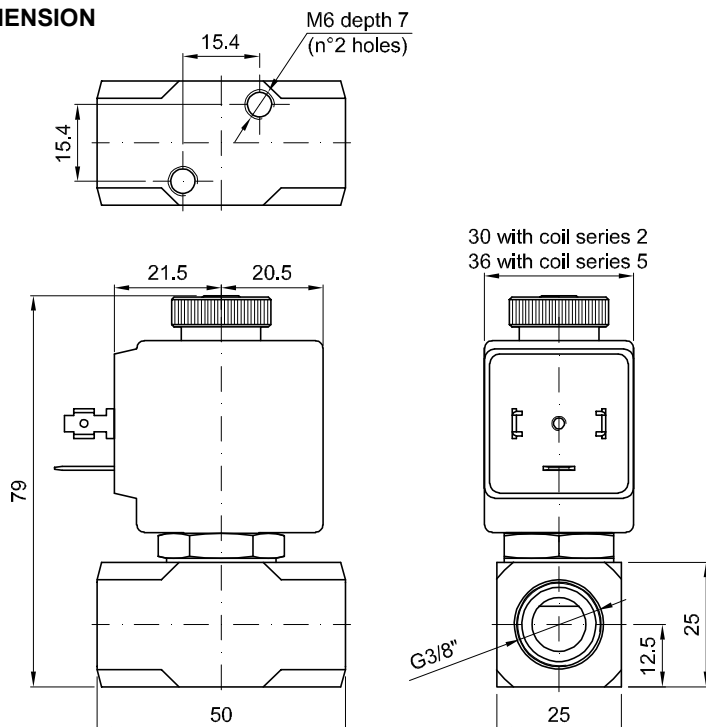


SPARE PARTS LIST

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



OVERALL DIMENSION

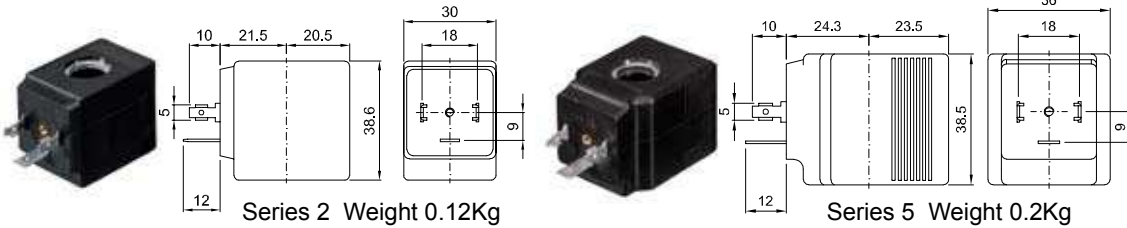


Weight with coil series 2=0.30Kg
 Weight with coil series 5=0.38Kg

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36 Code ②	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
 Continuous service ED100%

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

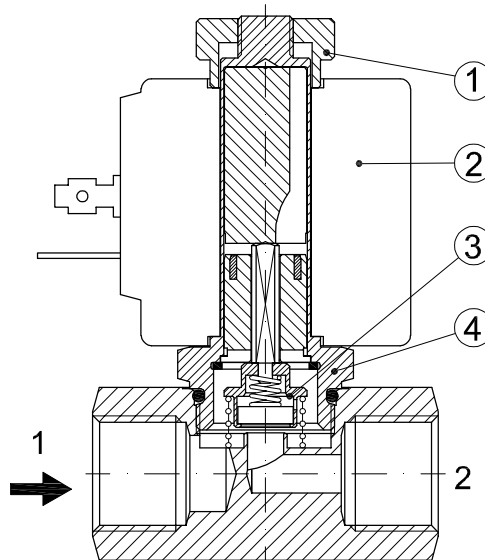


Series 2 Weight 0.12Kg

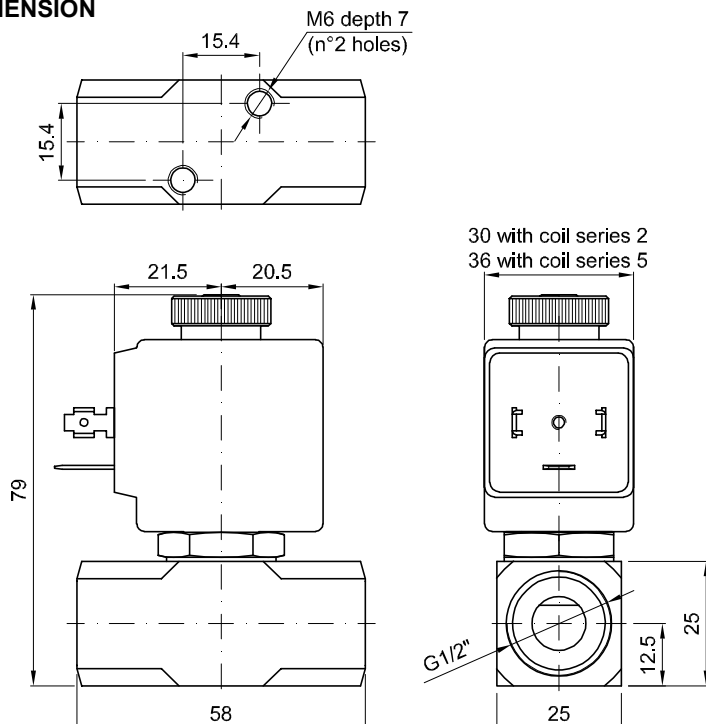
Series 5 Weight 0.2Kg

SPARE PARTS LIST

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



OVERALL DIMENSION

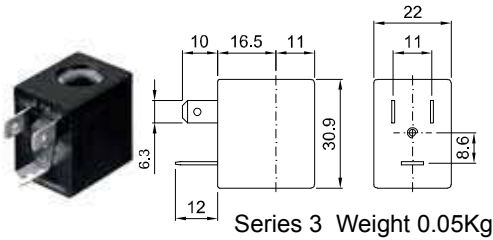


Weight with coil series 2=0.30Kg
 Weight with coil series 5=0.38Kg

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

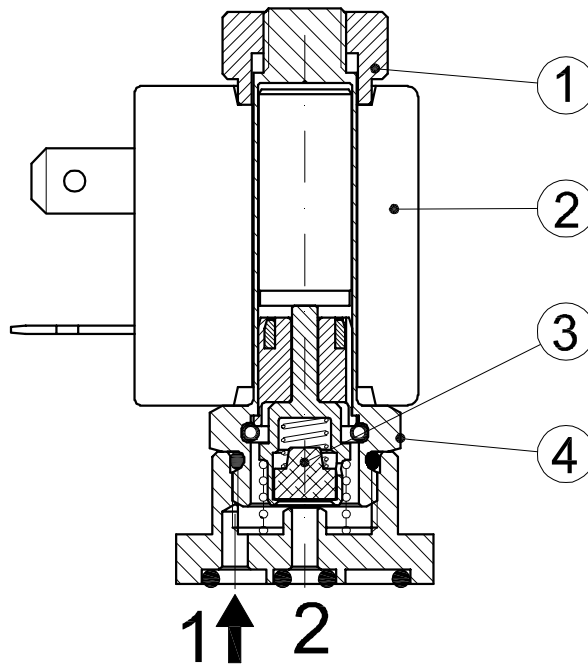
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

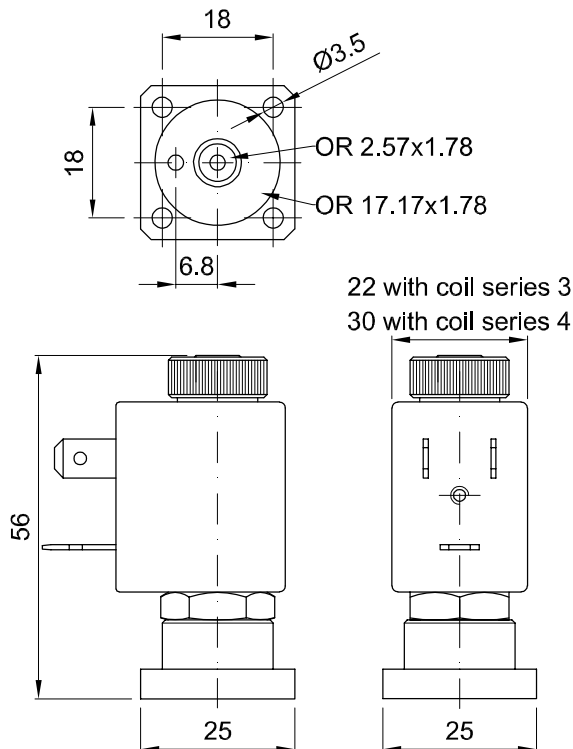


SPARE PARTS LIST

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



OVERALL DIMENSION



Weight = 0.15Kg

DESCRIPTION

Solenoid valve 2 way normally open
direct acting poppet type

CONSTRUCTION

Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM

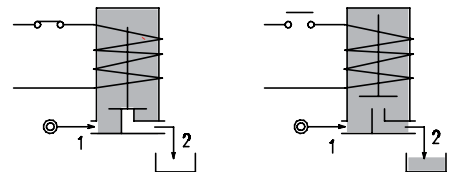
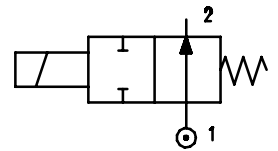


2

FEATURES

Maximum allowable pressure 50bar*
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position

OPTIONS: Stainless steel armature tube
 Electroless nickel plating



CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E214X...15///...	1/8"	1.5	0.07	0	23	-	20	15	-	2	30	NBR=B	-10 +90
E214X...20///...		2	0.1	0	17	-							
E214X...25///...		2.5	0.15	0	12	-							
E214X...35///...		3.5	0.32	0	7	-							
E214X...45///...		4.5	0.41	0	4.5	-							
E214X...15///...	1/8"	1.5	0.07	0	23	23	40	30	27	5	36	EPDM=E	-10 +140
E214X...20///...		2	0.1	0	17	17							
E214X...25///...		2.5	0.15	0	12	12							
E214X...35///...		3.5	0.32	0	7	7							
E214X...45///...		4.5	0.41	0	4.5	4.5							
D214X...15/3/...	1/8"	1.5	0.07	0	-	18	-	-	10	2	30	FPM=V	-10 +130
D214X...20/3/...		2	0.1	0	-	11							
D214X...25/3/...		2.5	0.15	0	-	7							
D214X...35/3/...		3.5	0.32	0	-	4							
D214X...45/5/...		4.5	0.41	0	-	3							

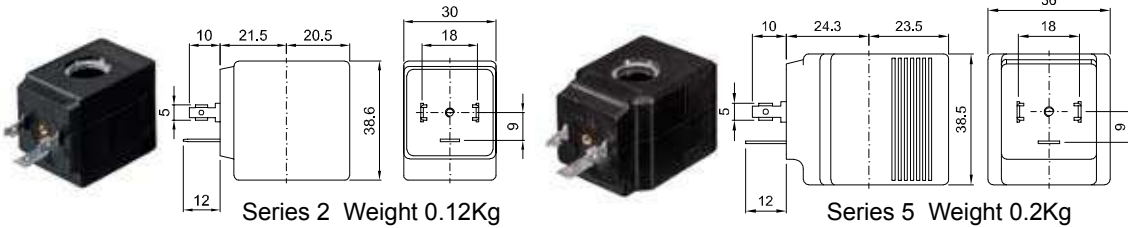
① Seal Example: E214XB20///20E NBR seal
 ② Coil Coil 230V 50/60Hz

* REMARK: The maximum allowable pressure PS for steam is 2,5bar (gauge pressure)

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

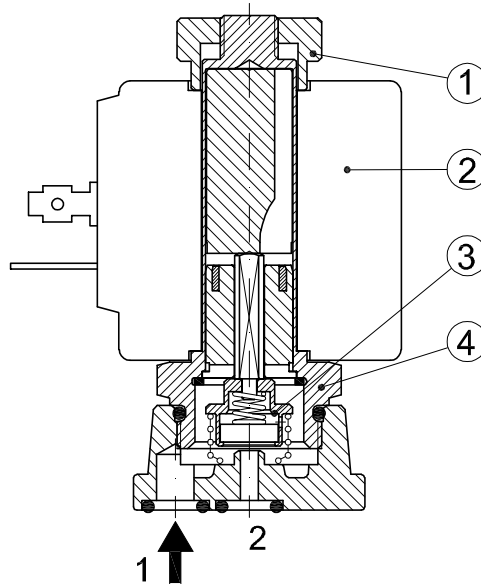
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

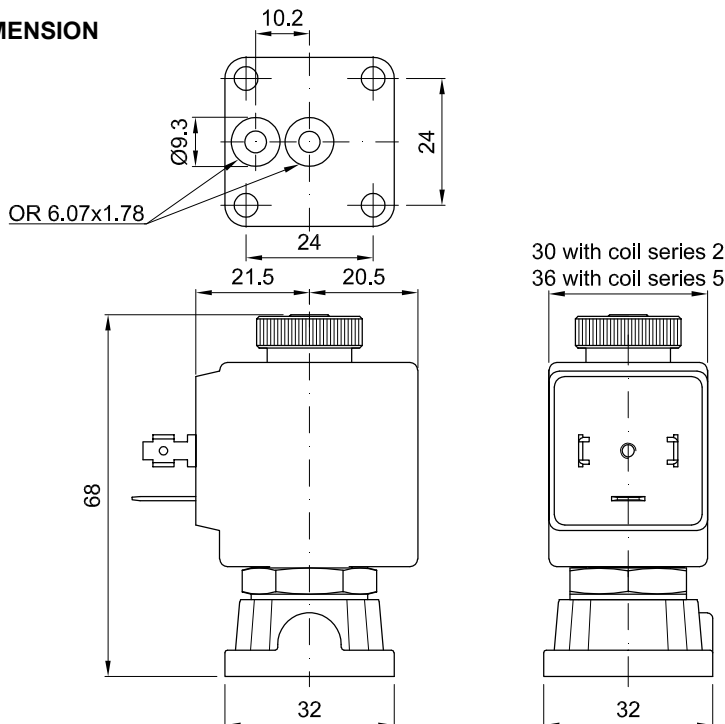


SPARE PARTS LIST

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



OVERALL DIMENSION

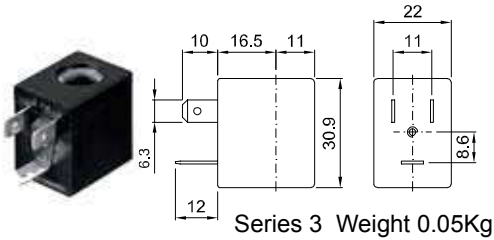


Weight with coil series 2=0.25Kg
 Weight with coil series 5=0.33Kg

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

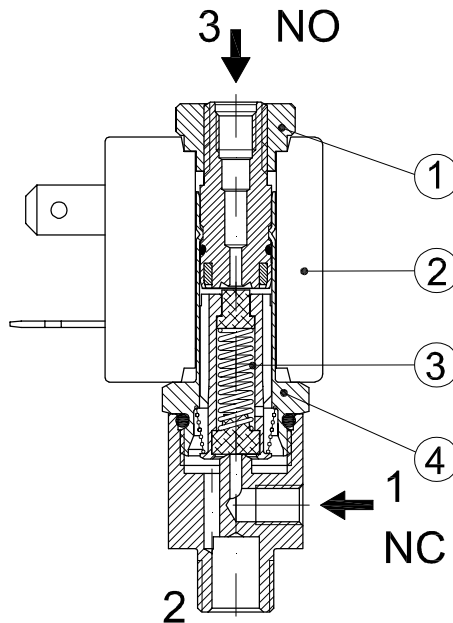
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

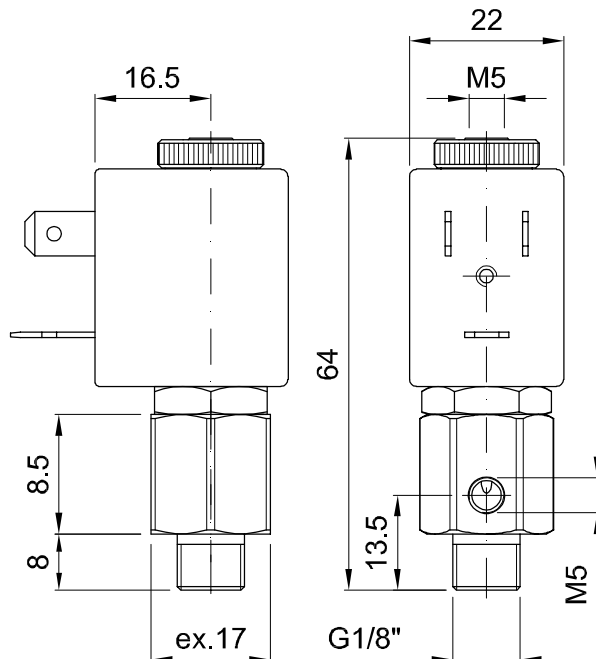


SPARE PARTS LIST

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



OVERALL DIMENSION



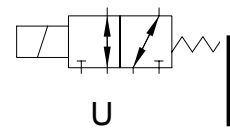
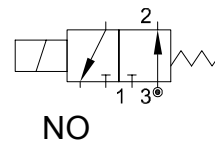
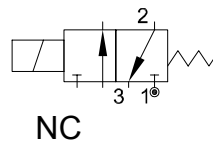
Weight=0.11Kg

DESCRIPTION

Solenoid valve 3 way
direct acting poppet type

CONSTRUCTION

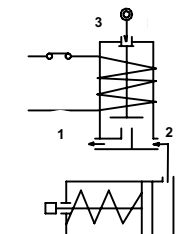
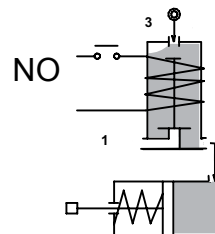
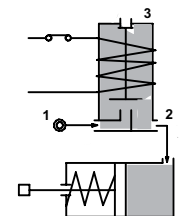
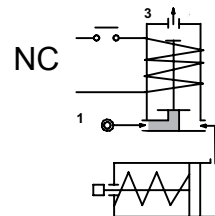
Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM



3

FEATURES

Maximum allowable pressure : maximum differential pressure +10%
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position



OPTIONS: Manual override
 Stainless steel armature tube
 Electroless nickel plating
 Series 7 explosion proof coil according to ATEX - EExmII
 Exhaust port with hosetail connection

CODE ① ②	Connection G ISO 228	Orifice mm		Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C		
		Inlet	Exh.		Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width				
NC Normally closed																
E305A...12///...	1/8"	1.2	1.5	0.04	0	15	15	12	8	6.5	3	22	NBR=B EPDM=E FPM=V	-10 +90		
E305A...15///...		1.5	1.5	0.06	0	10	10									
E305A...20///...		2	1.7	0.09	0	6	6									
NO Normally open																
E305A...15/S/...	1/8"	1.5	1.5	0.06	0	10	10	12	8	6.5	3	22			NBR=B EPDM=E FPM=V	-10 +140
E305A...17/S/...		1.7	2	0.07	0	6	6									
U Universal																
E305A...15/G/...	1/8"	1.5	1.5	0.06	0	6	6	12	8	6.5	3	22				

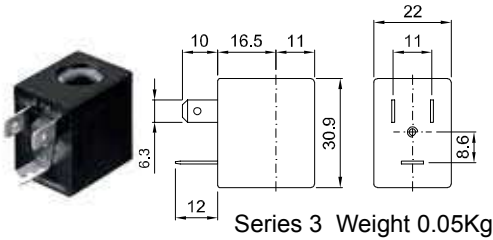
① Seal
 ② Coil

Example: E305AV15///30B FPM seal Coil 24V 50/60Hz NC
 E305AB15/S/301 NBR seal Coil 24V DC NO

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

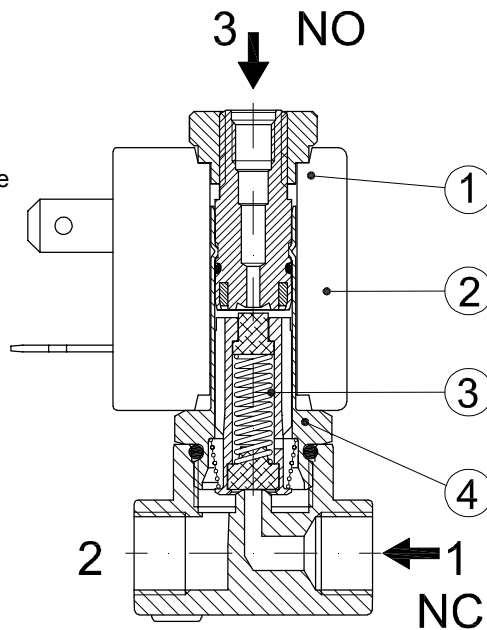
OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers



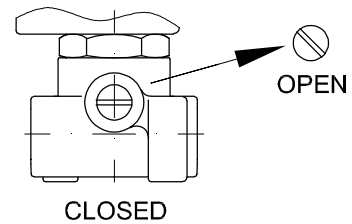
Series 3 Weight 0.05Kg

SPARE PARTS LIST

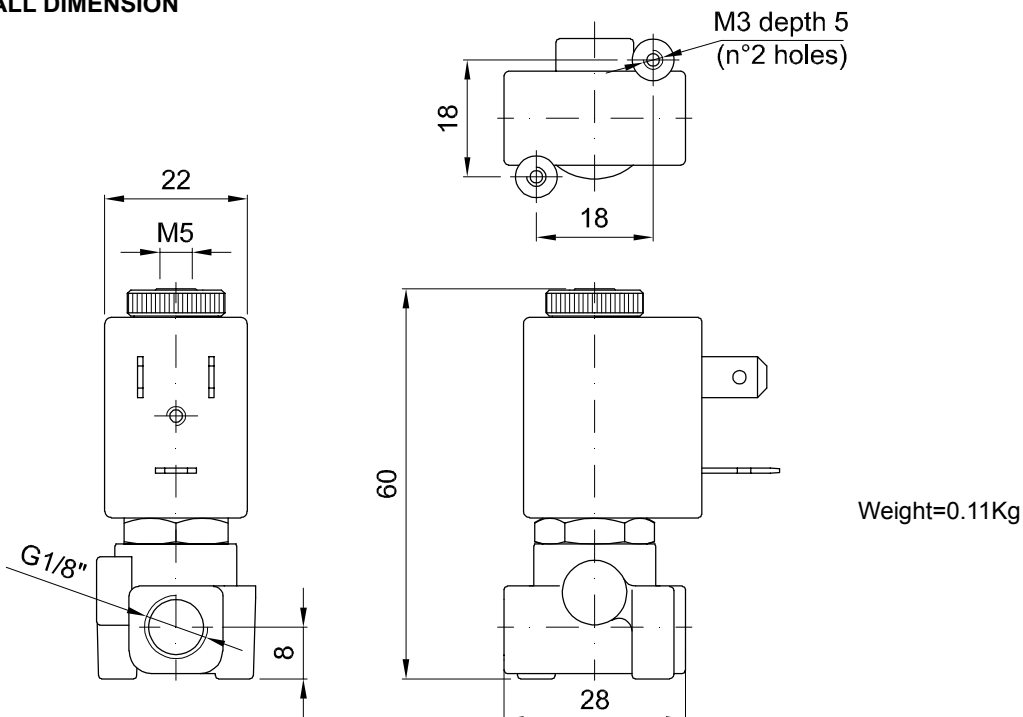
1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core



MANUAL OVERRIDE



OVERALL DIMENSION

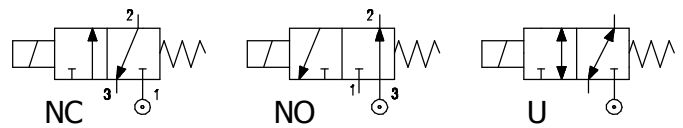


DESCRIPTION

Solenoid valve 3 way
direct acting poppet type

CONSTRUCTION

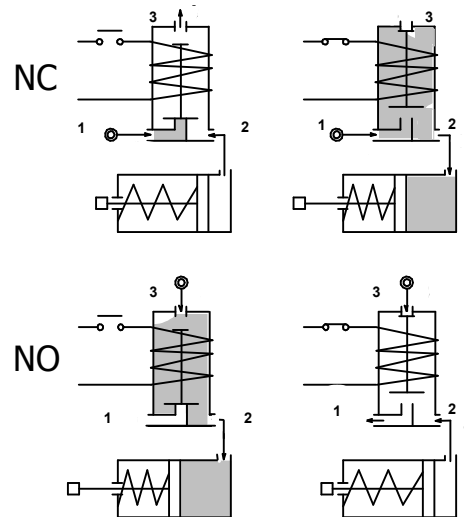
Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR
	FPM
	EPDM



3

FEATURES

- Maximum allowable pressure : maximum differential pressure +10%
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature : with class F coil -10°C +55°C
with class H coil -10°C +80°C
- Universal mounting position



- OPTIONS :** Manual override
Electroless nickel plating
Stainless steel seat

CODE ① ②	Connection G ISO 228	Orifice mm		KV m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
		Inlet	Exh.		Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
						AC	DC							
NC Normally closed														
E306A.....15///.....	1/8"	1.5	2.4	0.07	0	20	20	20	15	10	2	30	NBR=B	-10 +90
E306A.....20///.....		2	2.4	0.11	0	13	13							
E306A.....25///.....		2.5	2.4	0.16	0	10	10							
E306B.....15///.....	1/4"	1.5	2.4	0.07	0	20	20	20	15	10	2	30	EPDM=E	<+140
E306B.....20///.....		2	2.4	0.11	0	13	13							
E306B.....25///.....		2.5	2.4	0.16	0	10	10							
NO Normally open														
E306B.....24/S/.....	1/4"	2.4	2.5	0.16	0	9	9	20	15	10	2	30	FPM=V	-10 +130
E306B.....29/S/.....		2.9	3	0.20	0	6.5	6.5							
U Universal														
E306B.....25/G/.....	1/4"	2.5	2.4	0.16	0	5	4	20	15	10	2	30		

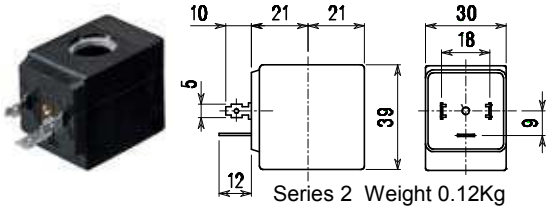
- ① Seal
- ② Coil

Example: E306BV15///20B FPM seal Coil 24V 50/60Hz NC
E306BB24/S/201 NBR seal Coil 24V DC NO

COILS	Alternating Current ~50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000

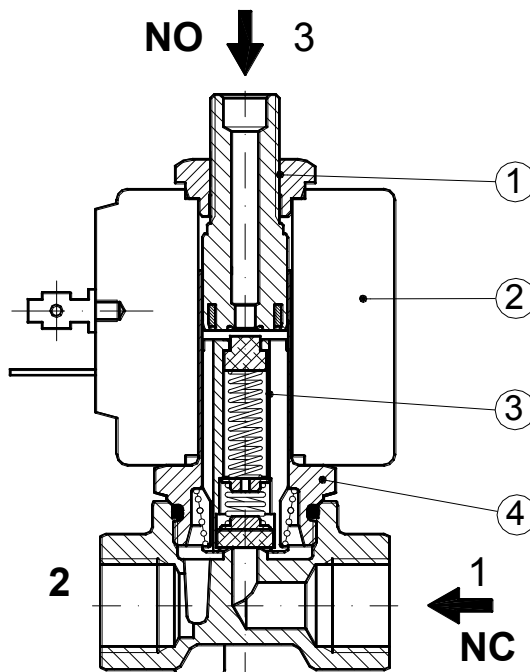
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltages
 Special coil powers

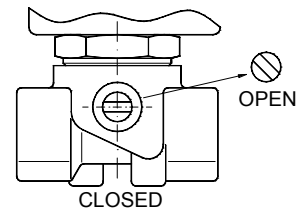


SPARE PARTS LIST

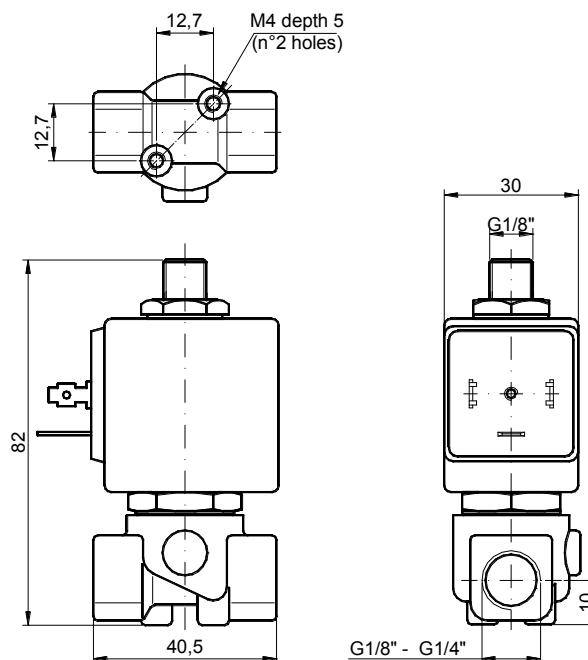
1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core



MANUAL OVERRIDE



OVERALL DIMENSION

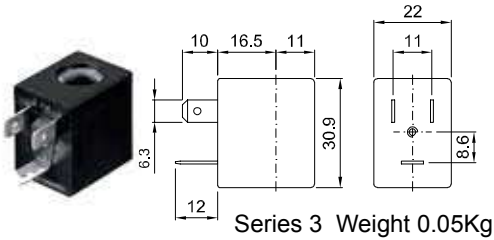


Weight = 0.32 Kg

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

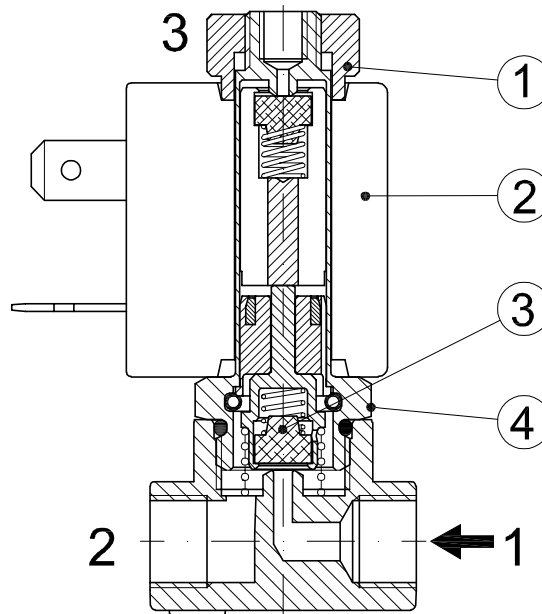
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

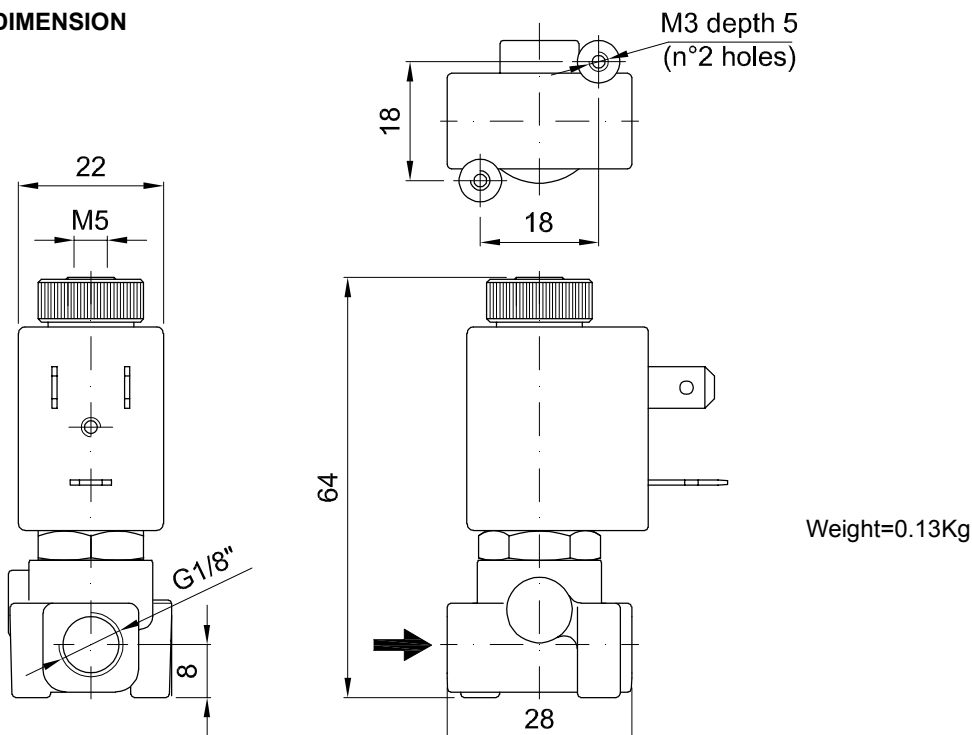


SPARE PARTS LIST

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



OVERALL DIMENSION

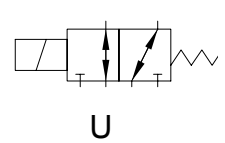
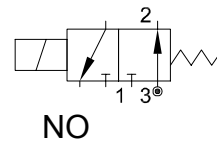
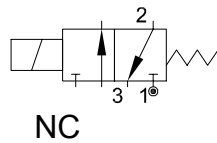


DESCRIPTION

Solenoid valve 3 way
direct acting poppet type

CONSTRUCTION

Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM



3

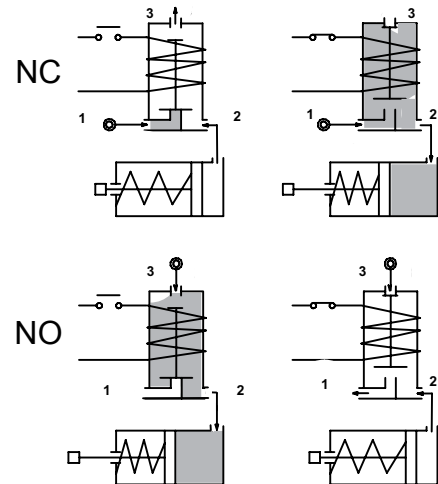
FEATURES

Maximum allowable pressure : maximum differential pressure +10%

Maximum fluid viscosity 25cSt (mm²/s)

Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C

Universal mounting position



- OPTIONS:**
- Silver shading ring
 - Electroless nickel plating
 - Series 7 explosion proof coil according to ATEX - EExmII
 - Exhaust port with hosedtail connection

CODE ① ②	Flange	Orifice mm		Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
		Inlet	Exh.		Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
NC Normally closed														
E312X...12///...	Q 25	1.2	1.5	0.04	0	15	15	12	8	6.5	3	22	NBR=B	-10 +90
E312X...15///...		1.5	1.7	0.06	0	10	10							
NO Normally open														
E312X...15/S/...	Q 25	1.5	1.5	0.06	0	10	10	12	8	6.5	3	22	EPDM=E	-10 +140
U Universal														
E312X...10/G/...	Q 25	1	1	0.028	0	10	10	12	8	6.5	3	22	FPM=V	-10 +130

① Seal
② Coil

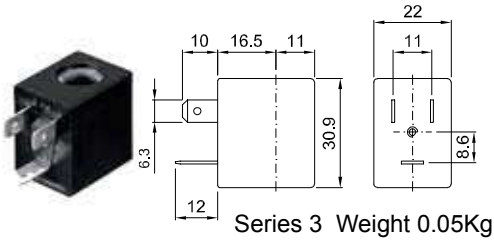
Example: E312XV15///30B FPM seal
E312XB15/S/301 NBR seal

Coil 24V 50/60Hz NC
Coil 24V DC NO

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

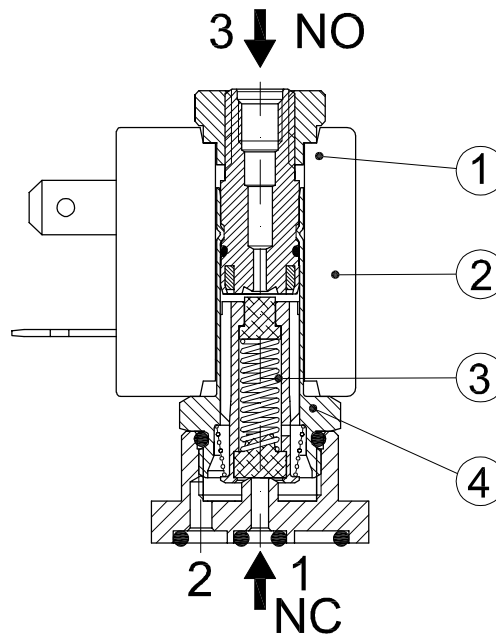
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

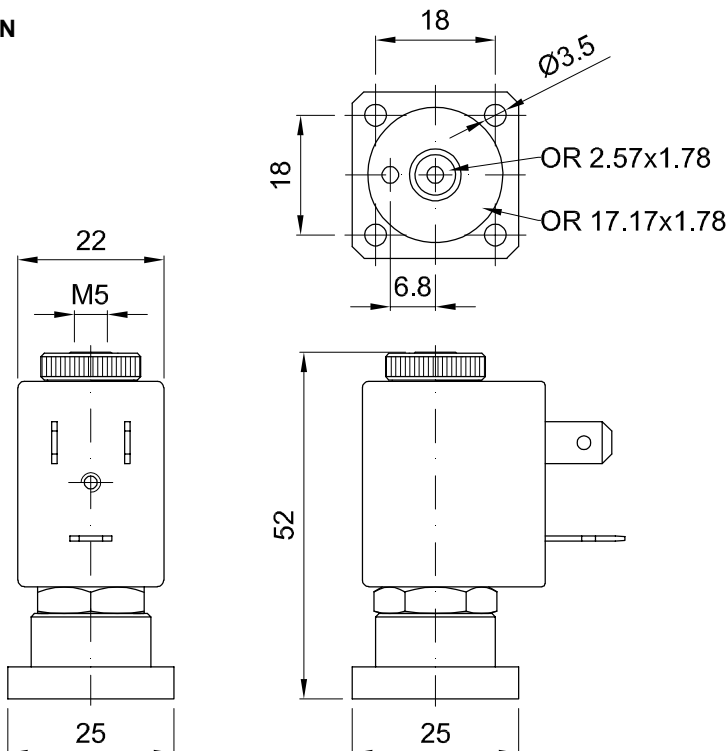


SPARE PARTS LIST

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



OVERALL DIMENSION



Weight=0.12Kg

DESCRIPTION

Solenoid valve 3 way normally open
direct acting poppet type

CONSTRUCTION

Body	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR
	FPM
	EPDM



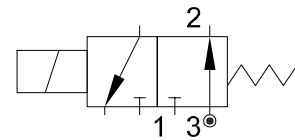
FEATURES

Maximum allowable pressure : maximum differential pressure +10%

Maximum fluid viscosity 25cSt (mm²/s)

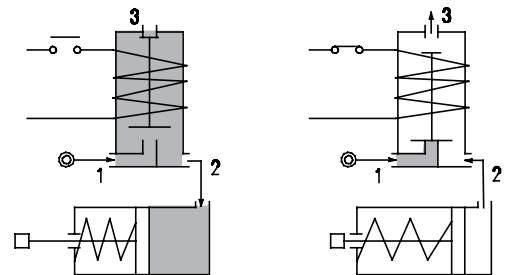
Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C

Universal mounting position



3

- OPTIONS:**
- Stainless steel armature tube
 - Electroless nickel plating
 - Series 7 explosion proof coil according to ATEX - EExmII
 - Exhaust port with hosedtail connection



CODE ① ②	Flange	Orifice mm		Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
		Inlet	Exh.		Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
E313X...12///...	Q 25	1.2	1.2	0.04	0	12	8	12	8	6.5	3	22	NBR=B EPDM=E FPM=V	-10 +90
E313X...15///...		1.5	1.2	0.06	0	9	6							-10 +140 -10 +130

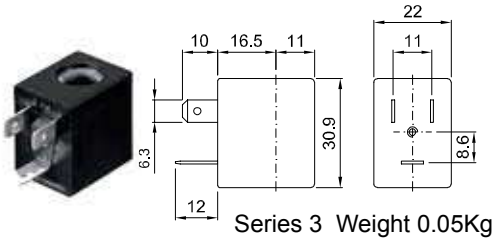
- ① Seal
- ② Coil

Example: E313XV15///301 FPM seal
Coil 24V DC

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

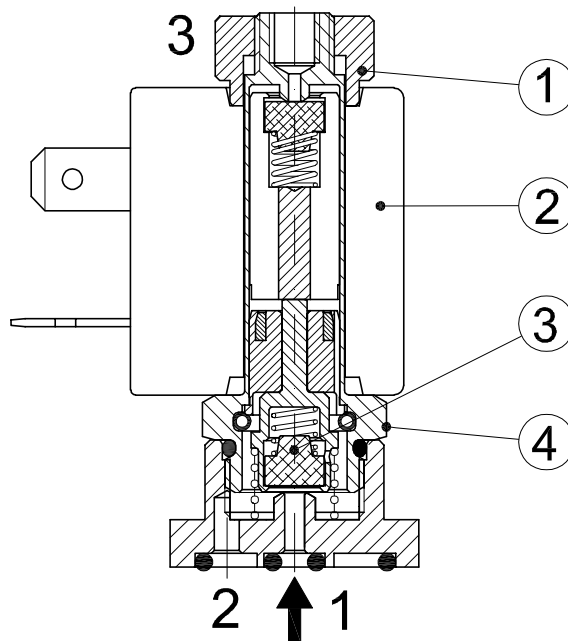
OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers



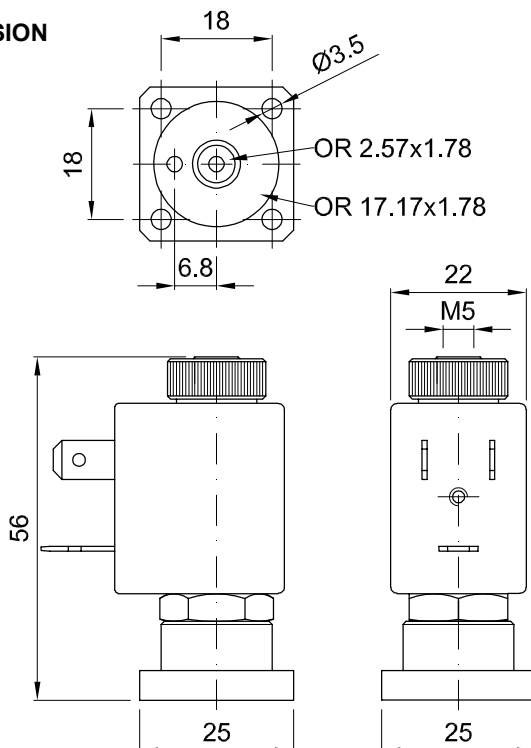
Series 3 Weight 0.05Kg

SPARE PARTS LIST

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



OVERALL DIMENSION



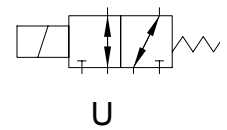
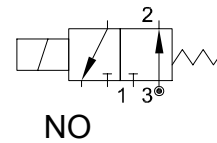
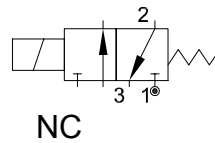
Weight=0.12Kg

DESCRIPTION

Solenoid valve 3 way
direct acting poppet type

CONSTRUCTION

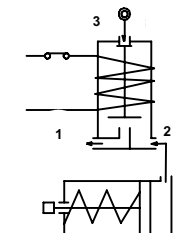
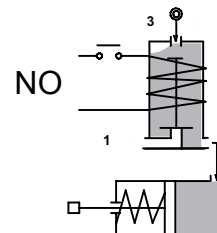
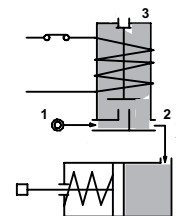
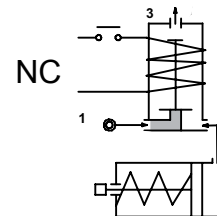
Body	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM



FEATURES

Maximum allowable pressure : maximum differential pressure +10%
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Universal mounting position

OPTIONS: Manual override
 Electroless nickel plating
 Stainless steel seat



CODE ① ②	Flange	Orifice mm		Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C		
		Inlet	Exh.		Min	Max		AC	VA	DC	Series	Width				
NC Normally closed																
E314X...15///...	Q 32	1.5	2.4	0.07	0	20	20	20	15	10	2	30	NBR=B	-10 +90		
E314X...20///...		2	2.4	0.11	0	13	13									
E314X...25///...		2.5	2.4	0.16	0	10	10									
NO Normally open																
E314X...24/S/...	Q 32	2.4	2.5	0.16	0	9	9	20	15	10	2	30			EPDM=E	-10 +140
E314X...29/S/...		2.9	3	0.20	0	6.5	6.5									
U Universal																
E314X...25/G/...	Q 32	2.5	2.4	0.16	0	5	4	20	15	10	2	30	FPM=V	-10 +130		

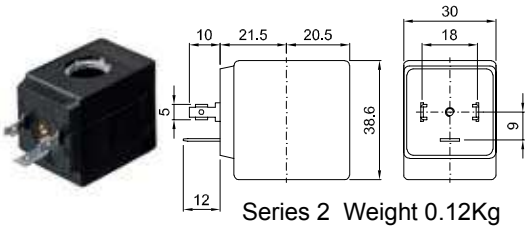
① Seal
 ② Coil

Example: E314XV15///20B FPM seal Coil 24V 50/60Hz NC
 E314XB24/S/201 NBR seal Coil 24V DC NO

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000

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
 Continuous service ED100%

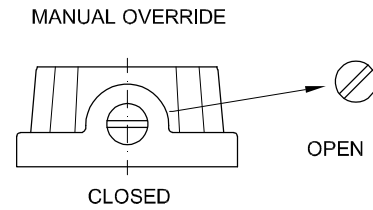
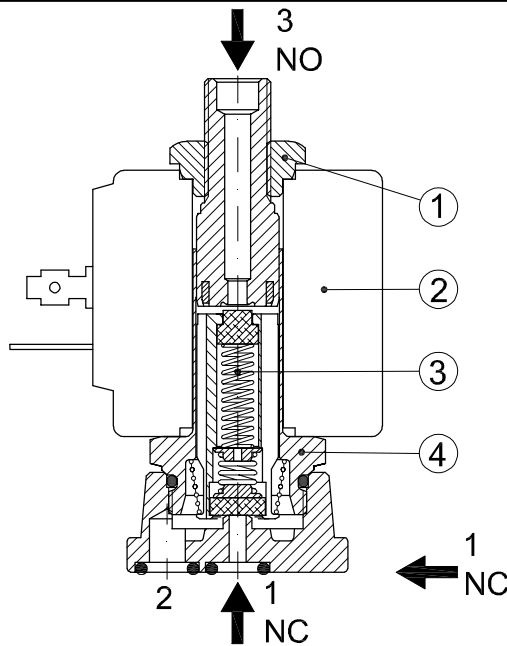
OPTIONS
 Class H insulation (series 2)
 Cable attached
 Special coil voltage
 Special coil powers



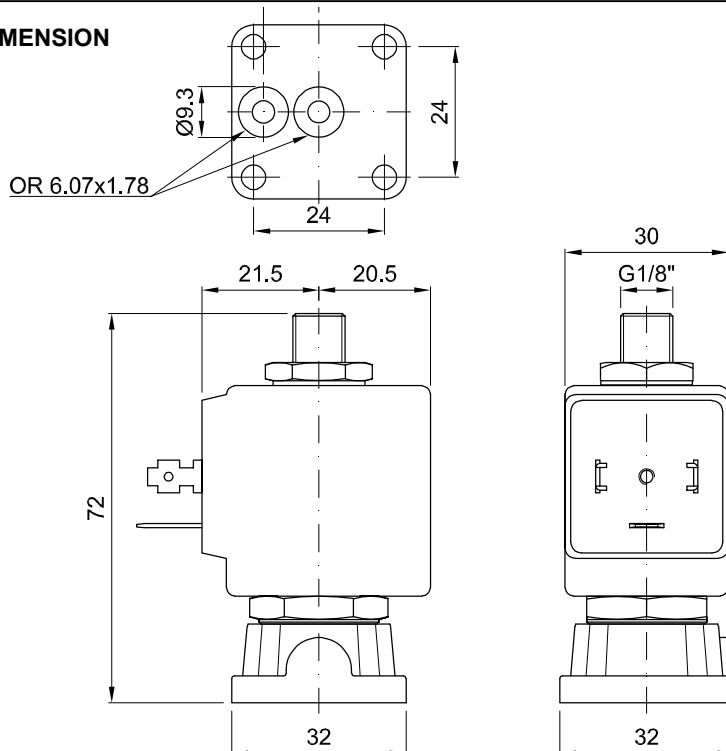
Series 2 Weight 0.12Kg

SPARE PARTS LIST

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



OVERALL DIMENSION



Weight=0.32Kg

DESCRIPTION

Solenoid valve 2 way normally closed with servo-assisted diaphragm

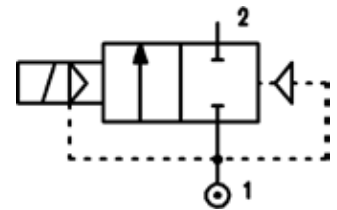
CONSTRUCTION

Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR - FPM - EPDM



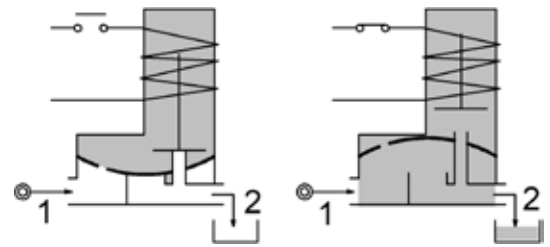
FEATURES

- Minimum differential pressure 0.15 bar
- Maximum allowable pressure* 25 bar
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C
- Preferred mounting position with vertical coil above



4

- OPTIONS:**
- Manual override
 - Electroless nickel plating
 - Series 7 explosion proof coil according to ATEX - EExmII
 - Version with slow closing diaphragm
 - Version for vacuum applications (air/gas)



Certified versions:



c us certified coils

CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E107B...10///...	1/4"	10	1.5	0.15	15	15	12	8	6.5	3	22	NBR=B	-10 +90
E107C...10///...	3/8"	10	1.7	0.15	15	15							
E107C...12///...	3/8"	12	2.2	0.15	15	15							
E107D...12///...	1/2"	12	2.5	0.15	15	15						EPDM=E	-10 +140
E107E...18///...	3/4"	18	5.5	0.15	13	13							
E107F...25///...	1"	25	10.2	0.15	10	10							
E107G...30///...	1" 1/4	30	15	0.15	10	10							
③E107C...12/W/...	3/8"	12	2.2	0.5	25	25	15	11	5	4	30	NBR=B	-10 +90
③E107D...12/W/...	1/2"	12	2.5	0.5	25	25							

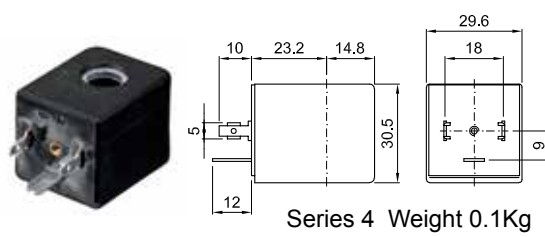
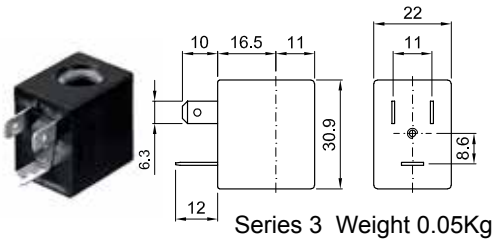
- ① Seal
- ② Coil
- ③ Reinforced diaphragm

Example: E107DB12///301 NBR seal
Coil 24V DC

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000
Series 4 Width 30 Code ②	40A	40B	40C	40D	40E	40F	40G	400	401	402	DIN 43650A	PG9 code 10349000

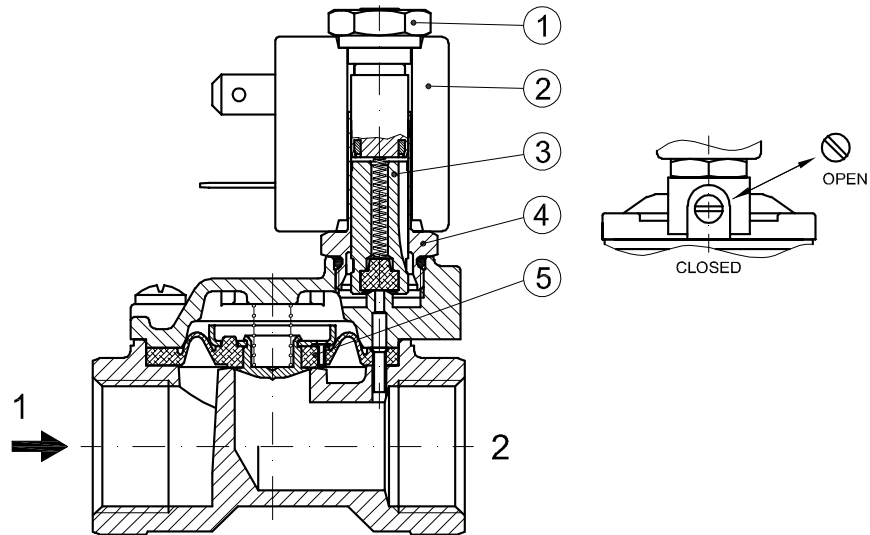
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers
 CE us certified coils

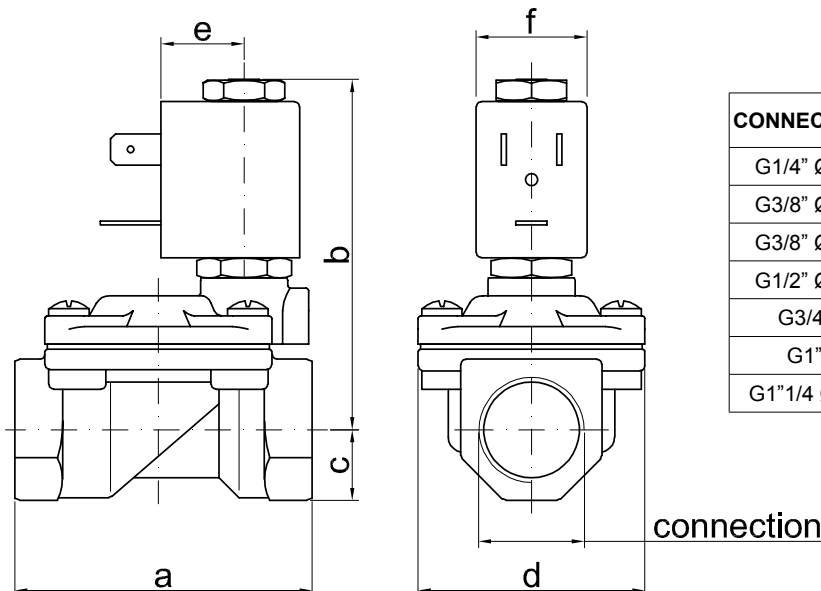


SPARE PARTS LIST

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



OVERALL DIMENSION



CONNECTION	a	b	c	d	e	f	weight Kg
G1/4" Ø10	49	65	11	32	16	22	0.23
G3/8" Ø10	49	65	11	32	16	22	0.24
G3/8" Ø12	59	70	14	45	16	22	0.42
G1/2" Ø12	59	70	14	45	16	22	0.39
G3/4"	79	76	18	55	16	22	0.65
G1"	96	85	20	72	16	22	1.05
G1 1/4" Ø30	119	92	25	85	16	22	1.70

DESCRIPTION

Solenoid valve 2 way normally closed with servo-assisted diaphragm

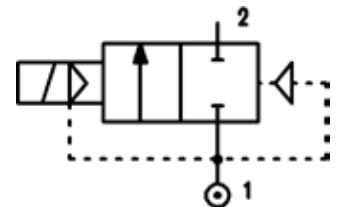
CONSTRUCTION

Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR - FPM - EPDM



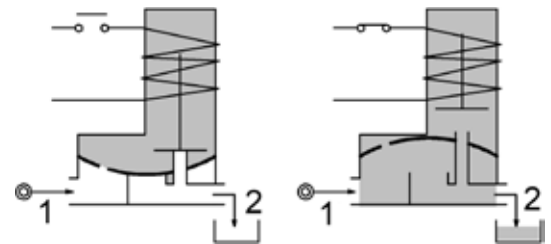
FEATURES

- Minimum differential pressure 0.15÷3 bar
- Maximum allowable pressure* 20 bar
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C
- Preferred mounting position with vertical coil above



4

- OPTIONS:**
- Manual override
 - Electroless nickel plating
 - Version for vacuum applications (air/gas)
 - us certified coils



CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Temp. range °C	
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		Seal ①
					AC	DC							
E107G...37///...	1"1/4	37	18	0.15	10	10	20	15	10	2	30	NBR=B EPDM=E FPM=V	-10 +90 -10 +140 -10 +140
E107H...37///...	1"1/2	37	21	0.15	10	10							
E107I...50///...	2"	50	36	0.15	10	10							
E107MB75///...	2"1/2	75	75	0.3	5	5	20	15	10	2	30	NBR=B	-10 +90
E107RB75///...	3"	75	84	0.3	5	5							
③E107MB75/W/...	2"1/2	75	75	3	15	15							
③E107RB75/W/...	3"	75	84	3	15	15							

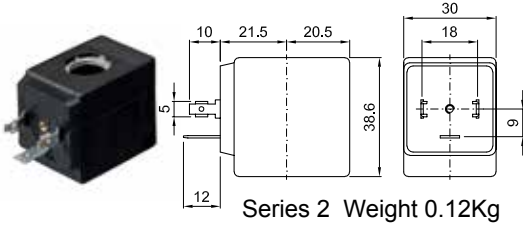
- ① Seal
 - ② Coil
 - ③ Reinforced diaphragm
- Example: E107IB50///201 NBR seal
Coil 24V DC

* REMARK: The maximum allowable pressure PS for steam 2,5bar (gauge pressure)

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000

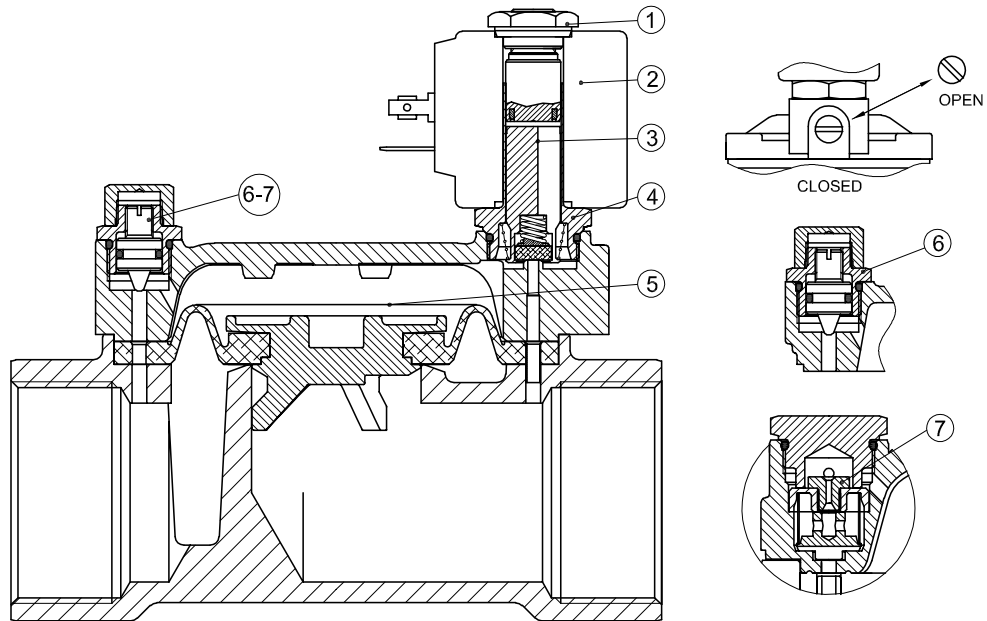
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers
 CE certified coils



SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core
5. Diaphragm assembly
6. Speed control valve
7. Water hammering reducer
 $\varnothing 0.8$ - $\varnothing 1$ - $\varnothing 1.2$



OVERALL DIMENSION

CONNECTION	a	b	c	d	e	f	weight Kg
G1"1/4	142	105	28	102	21	30	3.00
G1"1/2	142	105	28	102	21	30	2.85
G2"	158	115	35	119	21	30	4.30
G2"1/2	226	134	51	169	21	30	11.7
G3"	226	134	51	169	21	30	9.9

DESCRIPTION

Solenoid valve 2 way normally closed with servo-assisted diaphragm.

With explosion proof coil certified for hazardous area:

Ex II 2GD Ex d IIC T6 or T5 or T4 Gb
 Ex tb IIIC T80°C or T95°C or T130°C Db IP66
 Tamb -10°C ÷ +35°C(T6) or +50°C(T5) or +60°C(T4)

(other certifications e.g. Gost-r, Baseefa, CCOE etc. on request)

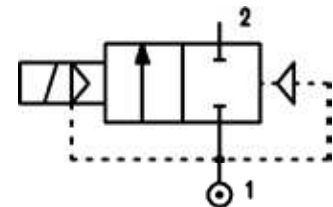


VALVE CONSTRUCTION

Body Brass
 Seal material FPM, NBR

EXPLOSION PROOF COIL CONSTRUCTION

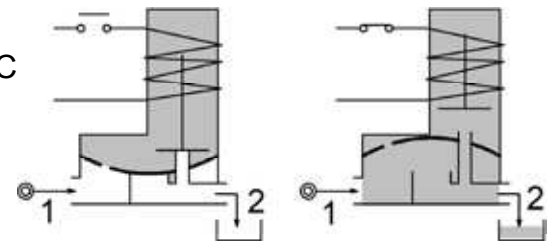
Housing Red colour alloy
 Electrical connection 1/2" NPT



FEATURES

Minimum allowable pressure 0.15bar
 Maximum allowable pressure 25bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: -10°C ÷ +35°C(T6), +50°C(T5), +60°C
 Mounting position with vertical coil above

OPTIONS: Electroless nickel-plating
 Versions with slow closing diaphragm



4

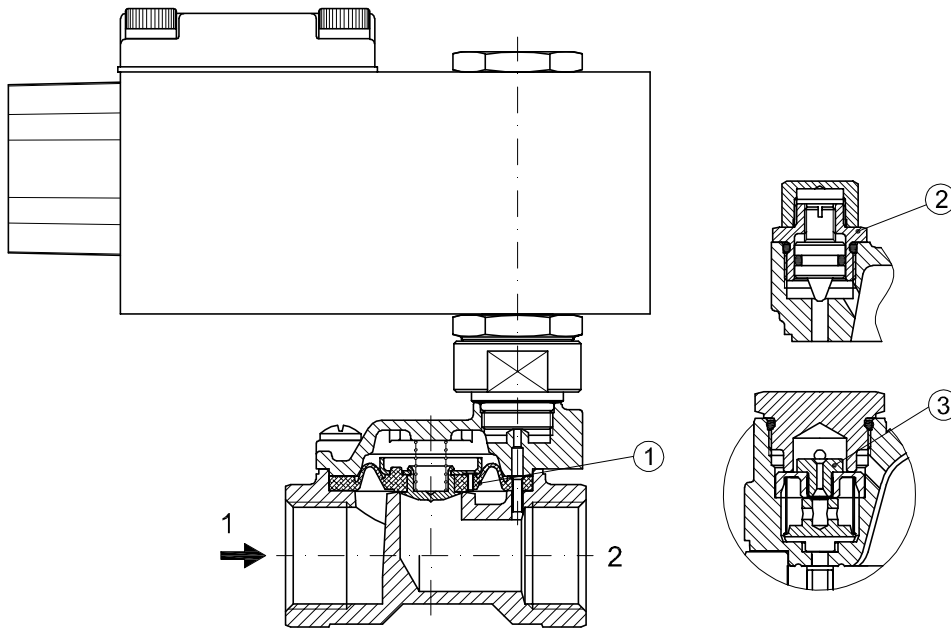
NOTE: The solenoid valve is suitable only with media that are **NOT** potentially explosive

CODE	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power		Coil Series	Seal	Temp. range °C
				Min	Max		AC Holding	DC			
A107BV10/1/...	1/4"	10	1.5	0.15	15	15	12 VA	8W	A6	FPM=V	-10 +130
A107CV10/1/...	3/8"	10	1.7	0.15	15	15					
A107CV12/1/...	3/8"	12	2.2	0.15	15	15					
A107DV12/1/...	1/2"	12	2.5	0.15	15	15					
A107EV18/1/...	3/4"	18	5.5	0.15	13	13					
A107FV25/1/...	1"	25	10.2	0.15	10	10					
A107GV30/1/...	1"1/4	30	15	0.15	10	10					
A107GV37/1/...	1"1/4	37	18	0.15	10	10					
A107HV37/1/...	1"1/2	37	21	0.15	10	10					
A107IV50/1/...	2"	50	36	0.15	10	10					
A107MB75/1/...	2"1/2	75	75	0.3	5	5				NBR=B	-10 +90
A107RB75/1/...	3"	75	84	0.3	5	5					

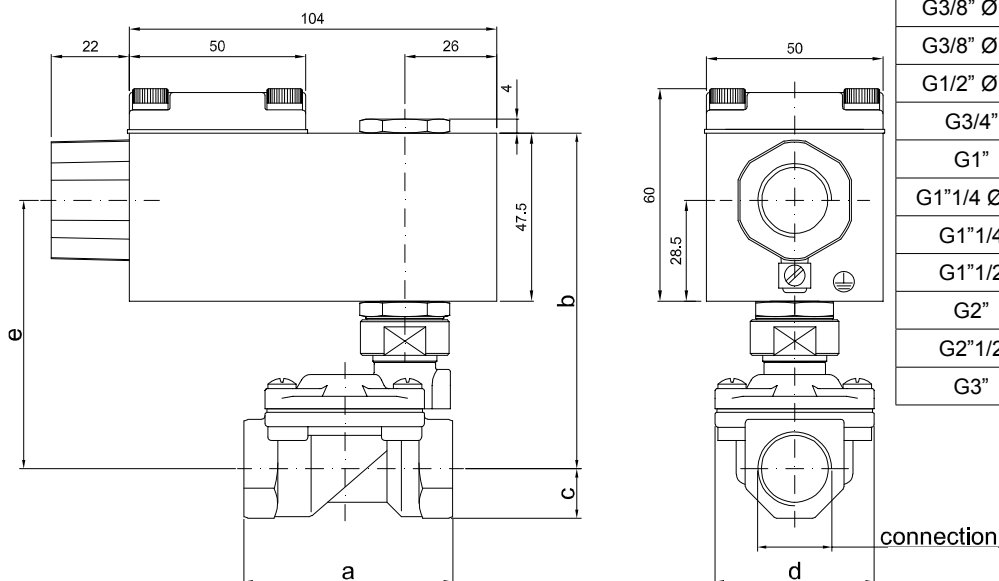
② Coil

COILS	Alternating Current 50/60Hz Volt				Direct Current Volt			Electrical connection
	24	48	110	220 230	12	24	48	
Series A6 Code ②	A6B	A6C	A6D	A6E	A60	A61	A62	1/2" NPT

DESCRIPTION
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class IP66
 Continuous service ED100%



OVERALL DIMENSION



CONNECTION	a	b	c	d	e	weight Kg
G1/4" Ø10	49	90	11	32	71	0.72
G3/8" Ø10	49	90	11	32	71	0.72
G3/8" Ø12	59	95	14	45	76	0.92
G1/2" Ø12	59	95	14	45	76	0.92
G3/4"	79	101	18	54	82	1.10
G1"	96	110	20	72	91	1.50
G1"1/4 Ø30	119	118	25	85	99	2.27
G1"1/4	142	110	28	102	91	3.33
G1"1/2	142	110	28	102	91	3.12
G2"	158	119	35	119	100	4.72
G2"1/2	226	138	51	169	119	10.4
G3"	226	138	51	169	119	10

DESCRIPTION

Solenoid valve 2 way normally closed with servo-assisted diaphragm

CONSTRUCTION

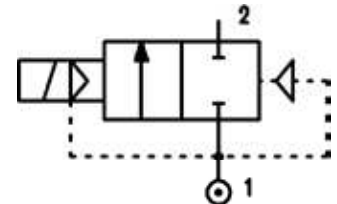
Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	FPM



FEATURES

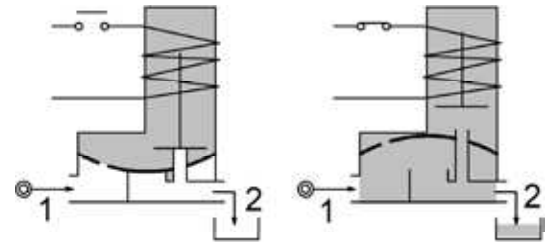
Maximum allowable pressure 25 bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C

Preferred mounting position with vertical coil above
 For complete diaphragm opening, a differential pressure of at least 0,15 bar is necessary



4

OPTIONS: Electroless nickel plating



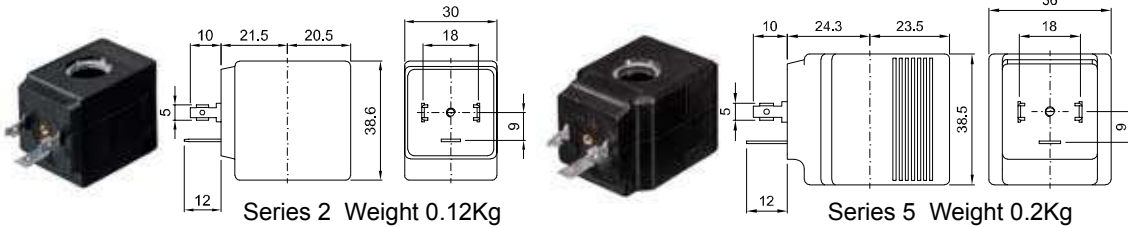
CODE ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E108CV12///...	3/8"	12	2	0	10	-	20	15	-	2	30	FPM=V	-10 +130
E108DV12///...	1/2"	12	2.2	0	10	-							
E108CV12///...	3/8"	12	2	0	12	10	40	30	27	5	36		
E108DV12///...	1/2"	12	2.2	0	12	10							
E108EV18///...	3/4"	18	4.5	0	9	-	40	30	-				
E108FV25///...	1"	25	8.5	0	7	-							
D108EV18///...	3/4"	18	4.5	0	-	9	-	-	27				
D108FV25///...	1"	25	8.5	0	-	8							

② Coil Example: E108FV25///52B FPM seal
 Coil 24V 50/60Hz

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36 Code ②	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
 Continuous service ED100%

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

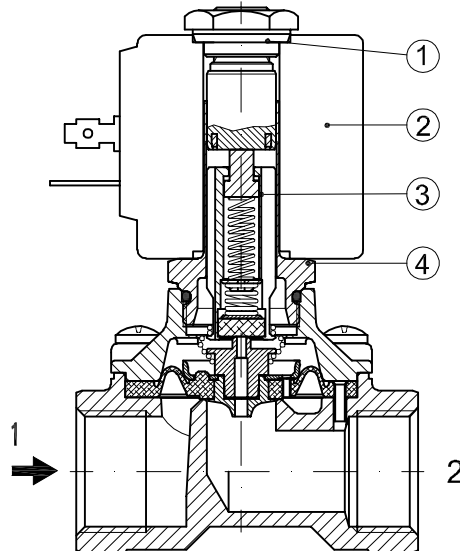


Series 2 Weight 0.12Kg

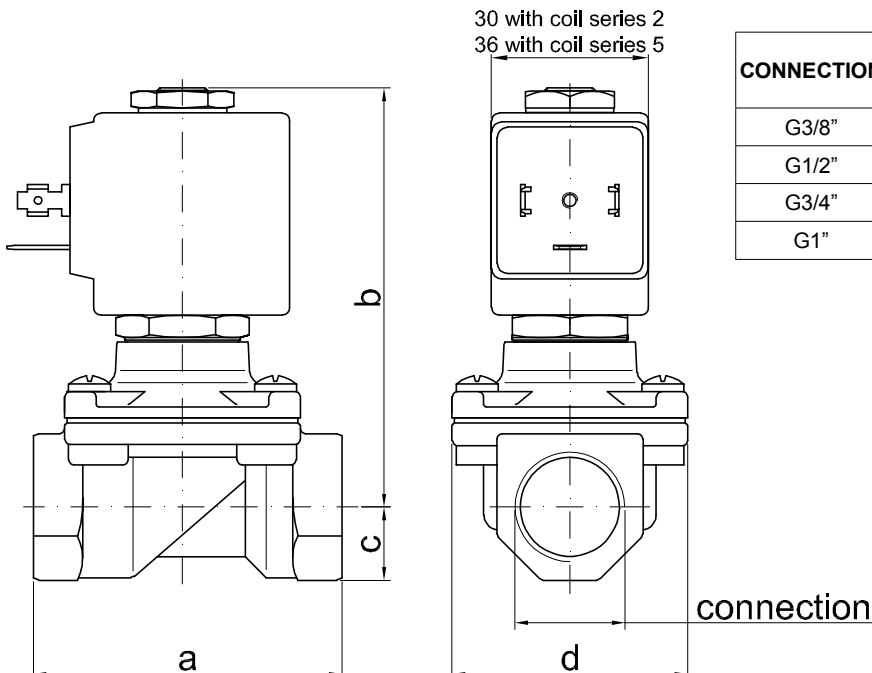
Series 5 Weight 0.2Kg

SPARE PARTS LIST

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



OVERALL DIMENSION



CONNECTION	a	b	c	d	weight Kg	
					series 2	series 5
G3/8"	59	83	14	45	0.52	0.60
G1/2"	59	83	14	45	0.49	0.57
G3/4"	79	90	18	55	-	0.81
G1"	96	101	20	72	-	1.22

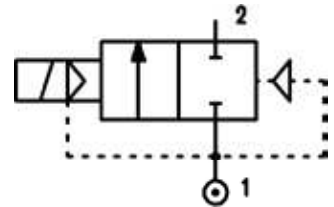
DESCRIPTION

Solenoid valve 2 way with servo-assisted diaphragm bi-stable.
 The bi-stable function is achieved by the use of a polarised permanent magnet energising the coil with a DC current for at least 15ms in the reverse direction of the previous impulse.



CONSTRUCTION

Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Magnet	NeFeB
Springs	Stainless steel
Seal material	NBR FPM EPDM

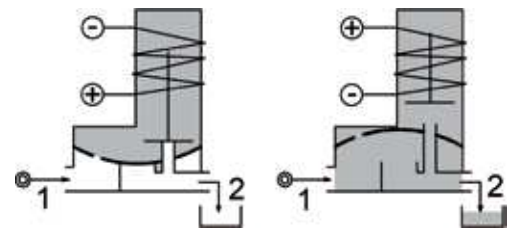


FEATURES

Minimum differential pressure 0.15 bar
 Maximum allowable pressure* 25 bar
 Maximum fluid viscosity 25cSt (mm²/s)
 Ambient temperature: with class F coil -10°C +55°C
 with class H coil -10°C +80°C
 Preferred mounting position with vertical coil above

OPTIONS: Special coil powers

Certified versions:



4

CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar		Nominal power DC Watt	Coil		Seal ①	Temp. range °C
				Min	Max		Series	Width		
D117B...10///...	1/4"	10	1.5	0.15	8	2	3	22	NBR=B	-10 +90
					15	5				
D117C...10///...	3/8"	10	1.7	0.15	8	2				
					15	5				
D117C...12///...	3/8"	12	2.2	0.15	8	2				
					15	5				
D117D...12///...	1/2"	12	2.5	0.15	8	2				
					15	5				
D117E...18///...	3/4"	18	5.5	0.15	8	2				
					13	5				
D117F...25///...	1"	25	10.2	0.15	8	2				
					10	5				
D117G...30///...	1"1/4	30	15	0.15	8	2				
					10	5				
								FPM=V	-10 +130	

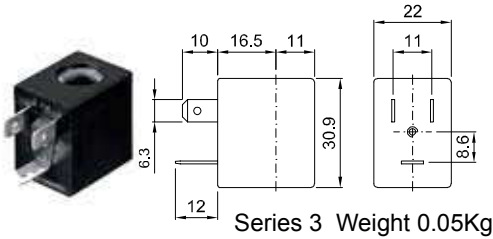
① Seal
 ② Coil

Example: D117DB12///301120 NBR seal
 Coil 24V DC 2W

COILS	Direct Current															Electrical connection	Connectors
	3V			6V			9V			12V			24V				
	2W	5W	6.5W	2W	5W	6.5W	2W	5W	6.5W	2W	5W	6.5W	2W	5W	6.5W		
Series 3 Width 22 Code ②	308120			305120	305150		307120	307150		300120	300150	300	301120	301150	301	DIN 46244	PG9 code 10348000

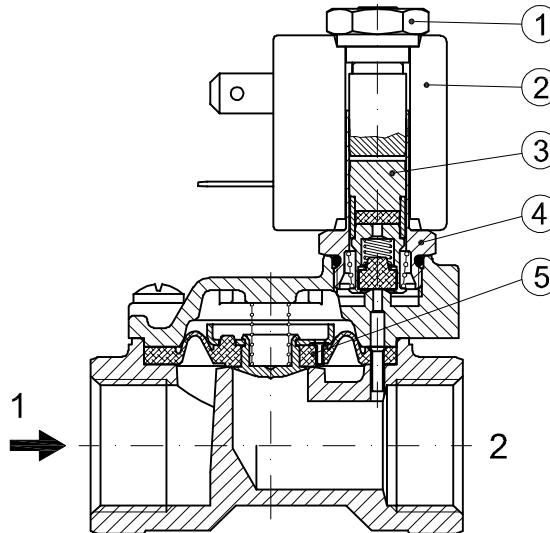
DESCRIPTION
 Class F insulation
 Voltage tolerance $\pm 10\%$
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

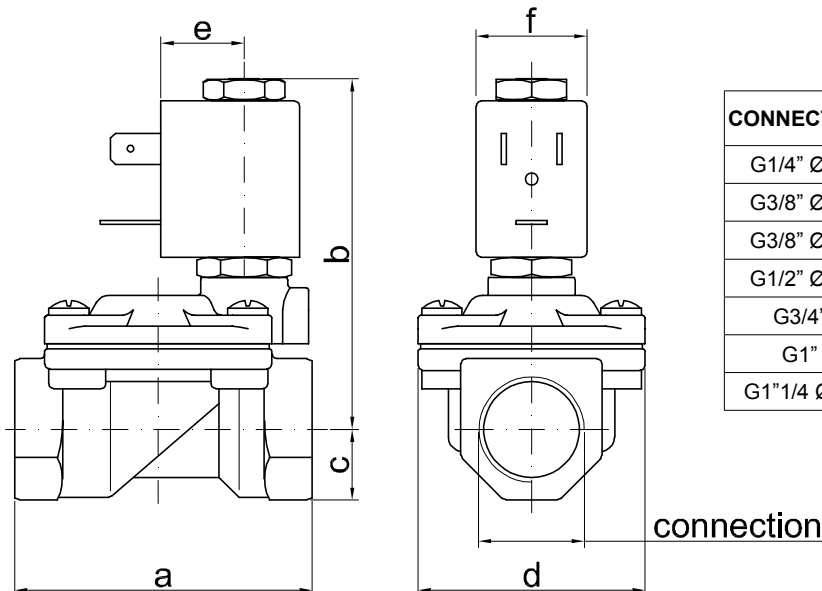


SPARE PARTS LIST

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



OVERALL DIMENSION



CONNECTION	a	b	c	d	e	f	weight Kg
G1/4" Ø10	49	65	11	32	16	22	0.23
G3/8" Ø10	49	65	11	32	16	22	0.24
G3/8" Ø12	59	70	14	45	16	22	0.42
G1/2" Ø12	59	70	14	45	16	22	0.39
G3/4"	79	76	18	55	16	22	0.65
G1"	96	85	20	72	16	22	1.05
G1 1/4" Ø30	119	92	25	85	16	22	1.70

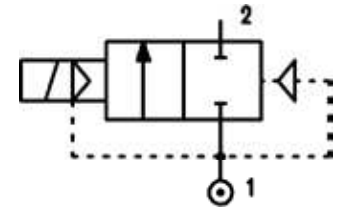
DESCRIPTION

Solenoid valve 2 way with servo-assisted diaphragm bi-stable.
 The bi-stable function is achieved by the use of a polarised permanent magnet energising the coil with a DC current for at least 15ms in the reverse direction of the preceding impulse.



CONSTRUCTION

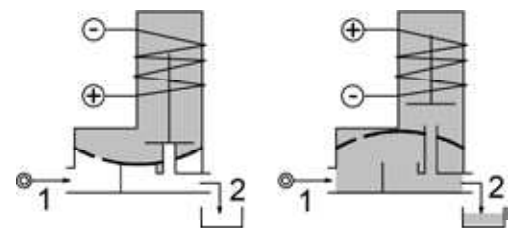
Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Magnet	NeFeB
Springs	Stainless steel
Seal material	NBR FPM EPDM



4

FEATURES

- Minimum differential pressure 0.15÷3 bar
- Maximum allowable pressure* 20 bar
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C
- Preferred mounting position with vertical coil above



OPTIONS: Special coil powers

CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar		Nominal power DC Watt	Coil		Seal ①	Temp. range °C
				Min	Max		Series	Width		
D117G...37///...	1"1/4	37	18	0.15	10	10	2	30	NBR=B	-10 +90
D117H...37///...	1"1/2	37	21	0.15	10					
D117I...50///...	3/8"	50	36	0.15	10					
D117MB75///...	1/2"	75	75	0.3	5					
D117RB75///...	3/4"	75	84	0.3	5					
③D117RB75/W/...	1"	75	75	3	10					
③D117MB75/W/...	1"1/4	75	84	3	10				FPM=V	-10 +130

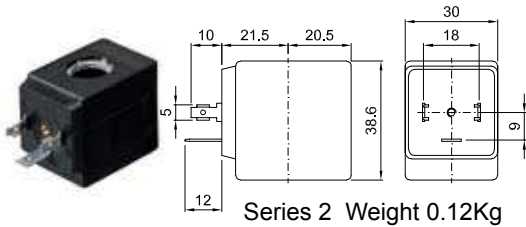
- ① Seal Example: D117IB50///201 NBR seal
- ② Coil Coil 24V DC
- ③ Reinforced diaphragm

* REMARK: The maximum allowable pressure PS for steam 2,5bar (gauge pressure)

COILS	Direct Current Volt			Electrical connection	Connectors
	12	24	48		
Series 2 Width 30 Code ②	200	201	202	DIN 43650A	PG9 code 10349000

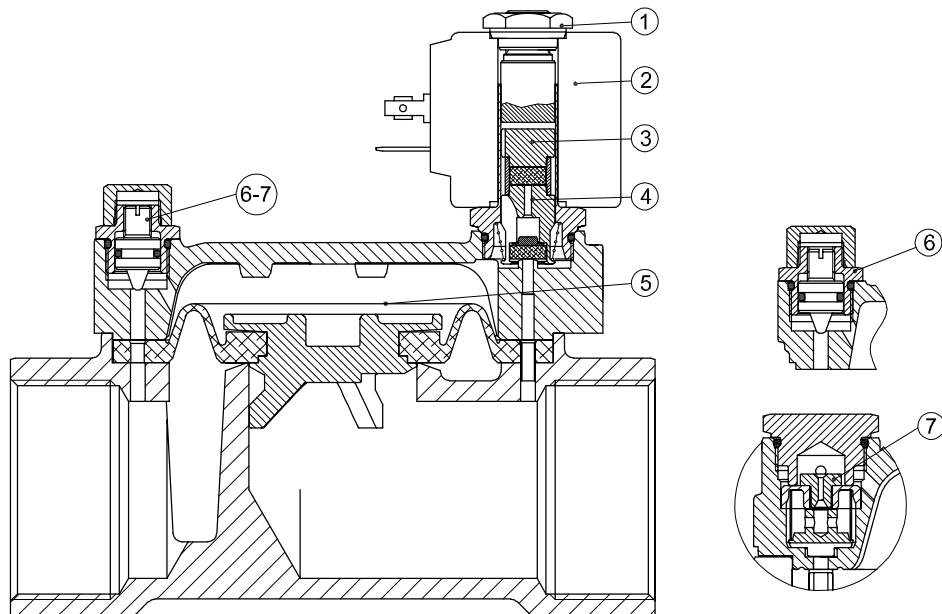
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers



SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core
5. Diaphragm assembly
6. Speed control valve
7. Water hammering reducer
 $\varnothing 0.8\text{-}\varnothing 1\text{-}\varnothing 1.2$



OVERALL DIMENSION

CONNECTION	a	b	c	d	e	f	weight Kg
G1"1/4	142	105	28	102	21	30	3.00
G1"1/2	142	105	28	102	21	30	2.85
G2"	158	115	35	119	21	30	4.30
G2"1/2	226	134	51	169	21	30	11.7
G3"	226	134	51	169	21	30	9.9

DESCRIPTION

Solenoid valve 2 way normally closed with servo-assisted piston

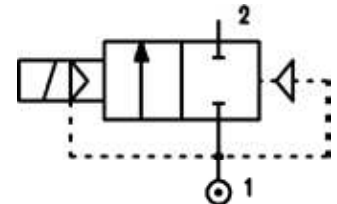
CONSTRUCTION

Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Piston	Brass
Piston seal	PTFE reinforced
Seal material	Main seal PTFE, other FPM



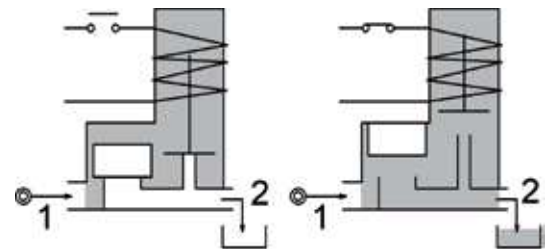
FEATURES

- Minimum differential pressure 1 bar
- Maximum allowable pressure 60 bar
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C
- Preferred mounting position with vertical coil above



4

OPTIONS: Electroless nickel plating



CODE ①	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E119BV52///...	1/4"	5.2	0.47	1.5	50	50	20	15	10	2	30	PTFE/ FPM	-10 +130
E119CV12///...	3/8"	12	2	1	30	30							
E119DV12///...	1/2"	12	2.2	1	30	30							
②E119CV12/1/...	3/8"	12	2	1	50	50	40	30	27	5	36		
②E119DV12/1/...	1/2"	12	2.2	1	50	50							

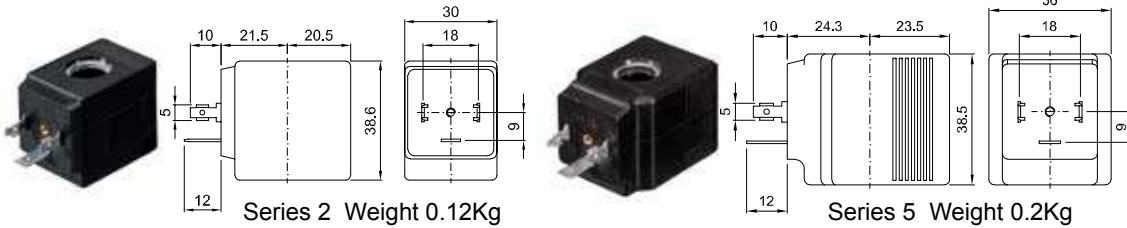
- ① Seal
- ② Maximum allowable pressure 60 bar

Example: E119DV12/1/521 FPM seal
Coil 24V DC
Maximum differential pressure 50bar

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

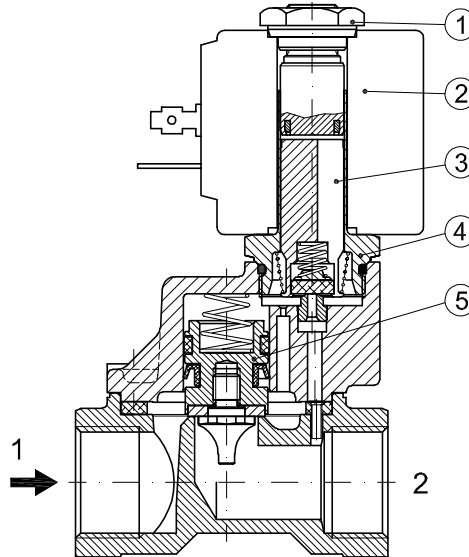
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

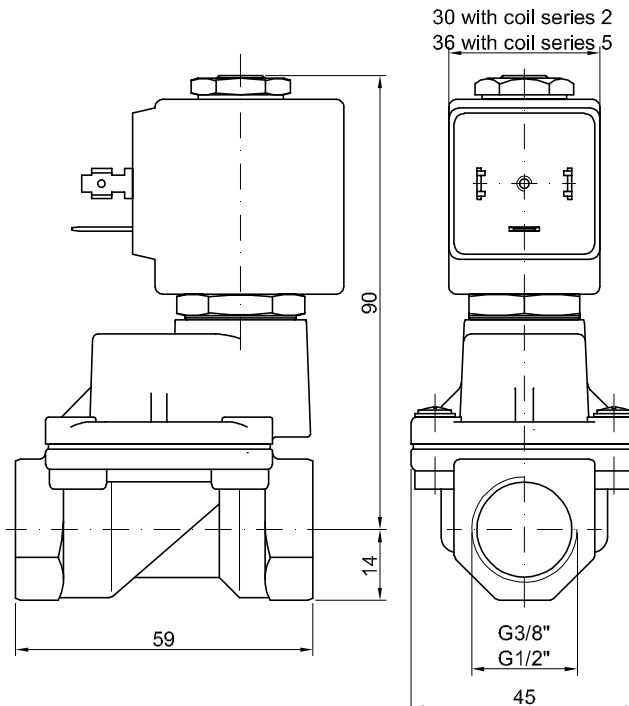


SPARE PARTS LIST

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



OVERALL DIMENSION



Weight with coil series 2=0.63Kg
 Weight with coil series 5=0.71Kg

DESCRIPTION

Solenoid valve 2 way normally closed with servo-assisted piston for use with steam

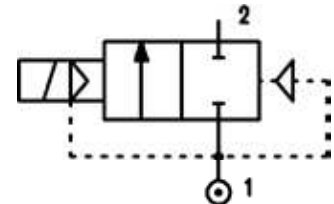
CONSTRUCTION

Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Piston	Stainless steel
Piston seal	PTFE reinforced
Seal material	Main seal PTFE, other FPM



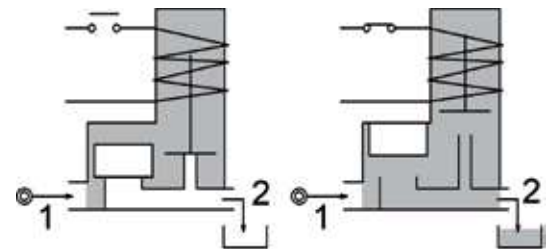
FEATURES

Minimum differential pressure 2,5 bar
 Ambient temperature with class H coil only: -10°C +80°C
 Preferred mounting position with vertical coil above



OPTIONS: Electroless nickel plating

4



CODE ①	Connection G ISO 228	Orifice mm	Kv m³/h	Differential pressure bar			Nominal power			Coil		Seal	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E119CW12/1/...	3/8"	12	2	2.5	9	9	20	15	10	2	30	PTFE/ FPM	-10 +180
E119DW12/1/...	1/2"	12	2.2	2.5	9	9							

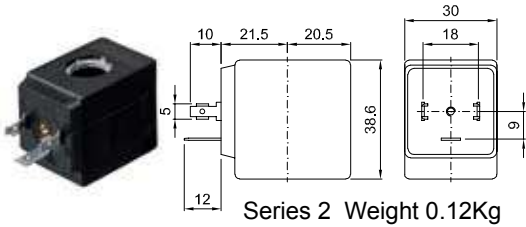
① Seal
 Maximum allowable leakage <0.2NI/h

Example: E119DW12/1/221 FPM seal
 Coil 24V DC

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	22A	22B	22C	22D	22E	22F	22G	220	221	222	DIN 43650A	PG9 code 10349000

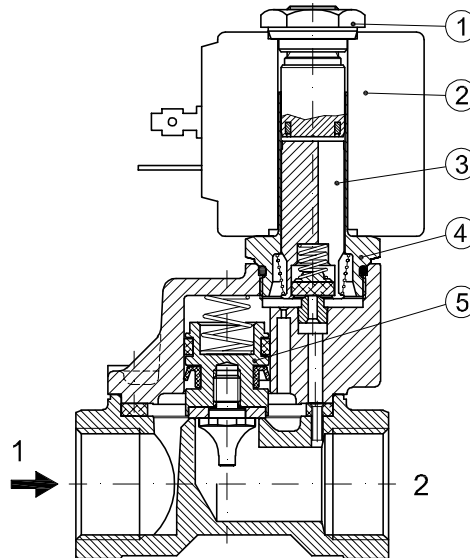
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Cable attached
 Special coil voltage
 Special coil powers

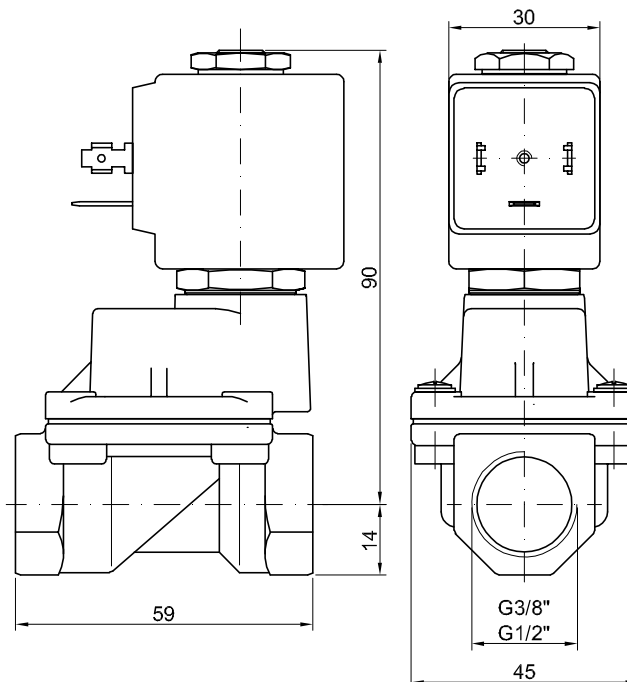


SPARE PARTS LIST

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



OVERALL DIMENSION

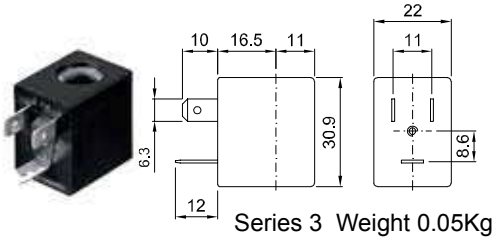


Weight=0.63Kg

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 3 Width 22 Code ②	30A	30B	30C	30D	30E	30F	30G	300	301	302	DIN 46244	PG9 code 10348000

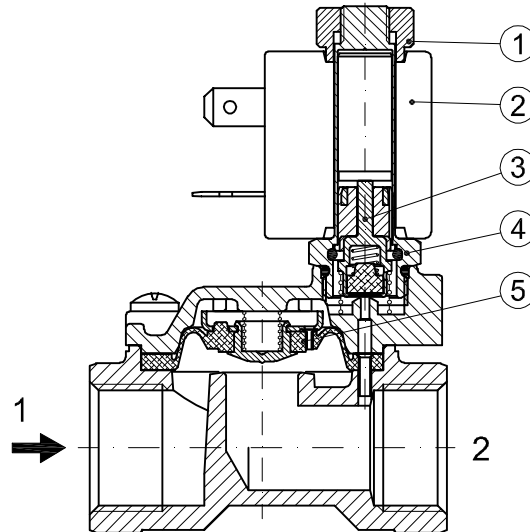
DESCRIPTION
 Class F insulation
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

OPTIONS
 Class H insulation
 Cable attached
 Special coil voltage
 Special coil powers

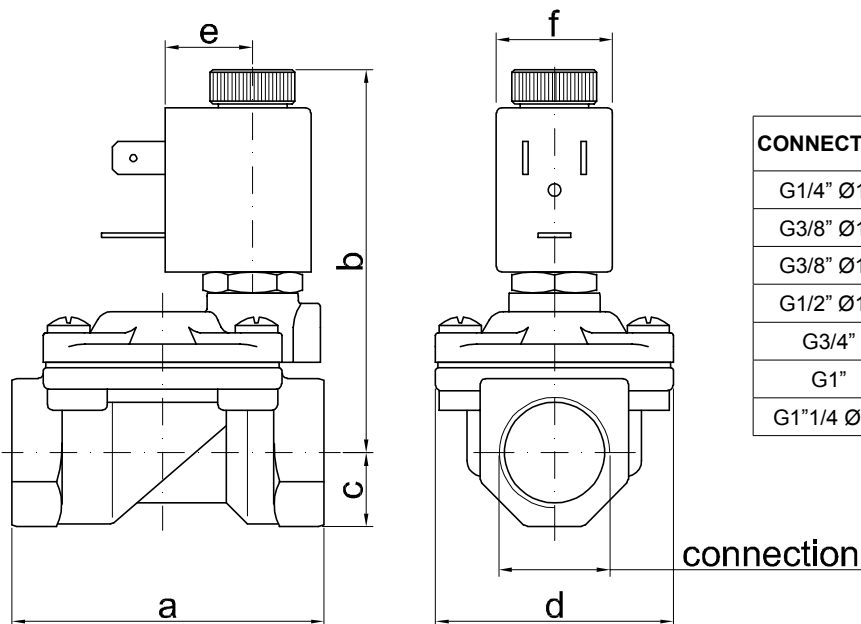


SPARE PARTS LIST

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



OVERALL DIMENSION



CONNECTION	a	b	c	d	e	f	weight Kg
G1/4" Ø10	49	65	11	32	16	22	0.23
G3/8" Ø10	49	65	11	32	16	22	0.24
G3/8" Ø12	59	73	14	45	16	22	0.42
G1/2" Ø12	59	73	14	45	16	22	0.39
G3/4"	79	76	18	55	16	22	0.65
G1"	96	85	20	72	16	22	1.05
G1 1/4" Ø30	119	96	25	85	16	22	1.70

DESCRIPTION

Solenoid valve 2 way normally open with servo-assisted diaphragm

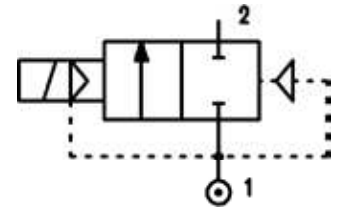
CONSTRUCTION

Body and cover	Brass
Armature tube	Stainless steel
Plunger and core	Stainless steel
Springs	Stainless steel
Seal material	NBR FPM EPDM



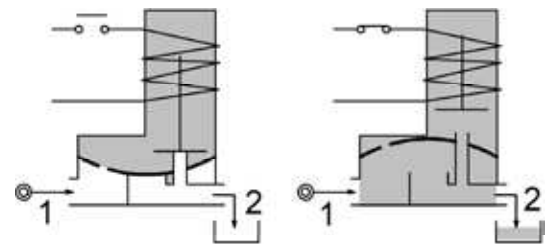
FEATURES

- Minimum differential pressure 0.15÷3 bar
- Maximum allowable pressure* 20 bar
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C
- Preferred mounting position with vertical coil above



4

OPTIONS: Electroless nickel plating



CODE ① ②	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
E207G...37///...	1"1/4	37	18	0.15	10	10	20	15	10	2	30	NBR=B EPDM=E FPM=V	-10 +90 -10 +140 -10 +130
E207H...37///...	1"1/2	37	21	0.15	10	10							
E207I...50///...	2"	50	36	0.15	10	10							
E207MB75///...	2"1/2	75	75	0.3	5	5	20	15	10	2	30	NBR=B	-10 +90
E207RB75///...	3"	75	84	0.3	5	5							
③E207MB75/W/...	2"1/2	75	75	3	15	15	40	30	27	5	36		
③E207RB75/W/...	3"	75	84	3	15	15							

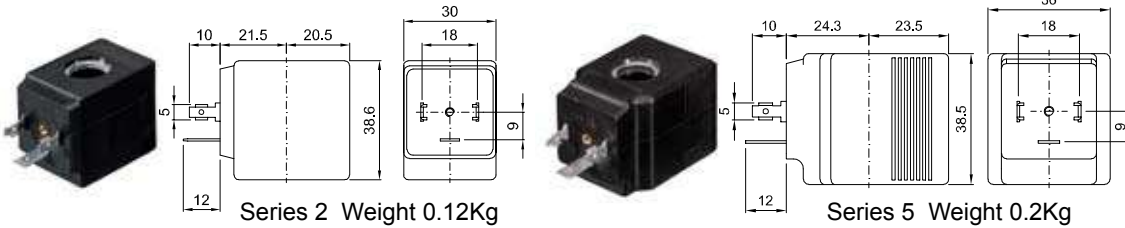
- ① Seal
 - ② Coil
 - ③ Reinforced diaphragm
- Example: E207HB37///201 NBR seal
Coil 24V DC

* REMARK: The maximum allowable pressure PS for steam 2,5bar (gauge pressure)

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000
Series 5 Width 36 Code ②	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
 Continuous service ED100%

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

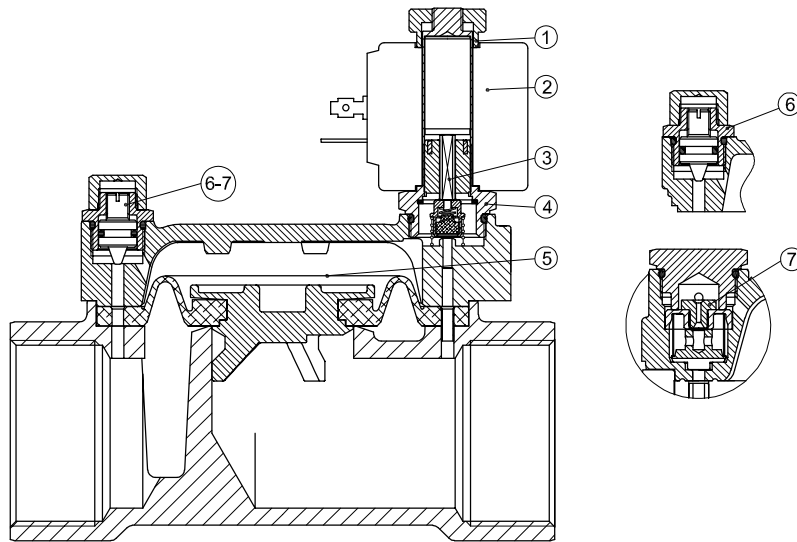


Series 2 Weight 0.12Kg

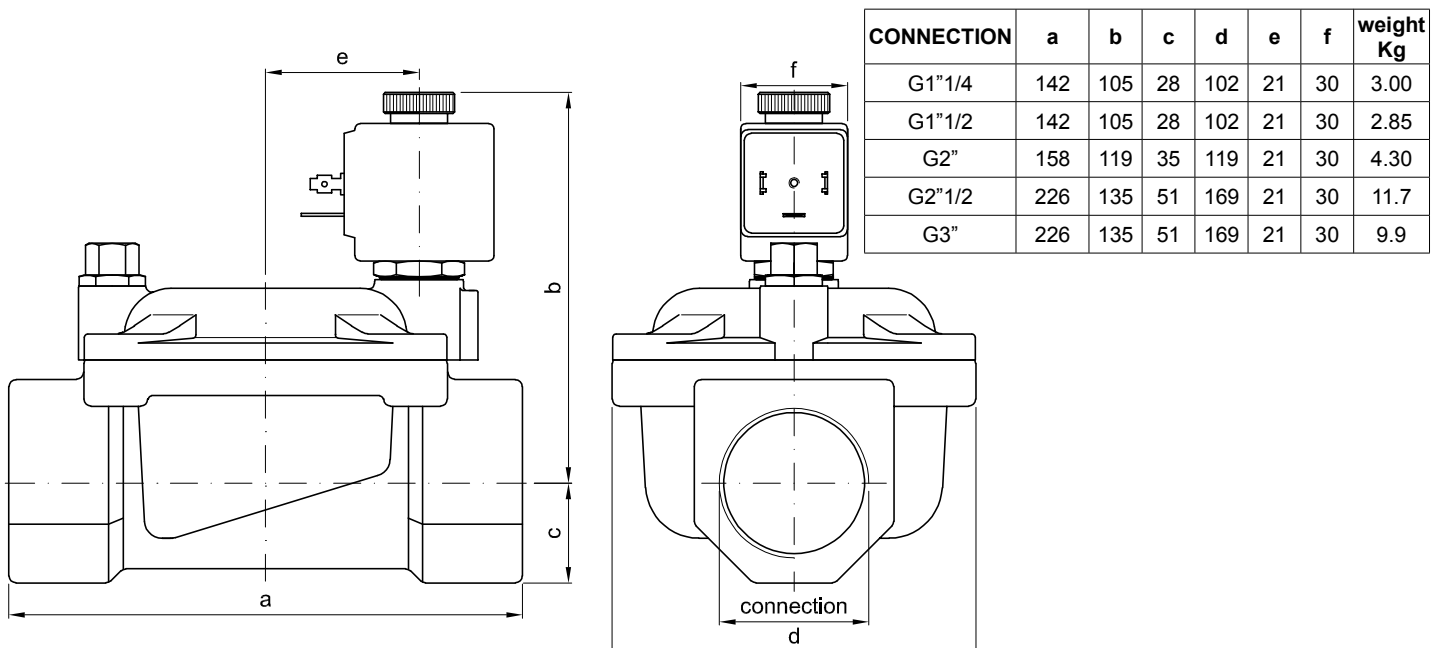
Series 5 Weight 0.2Kg

SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core
5. Diaphragm assembly
6. Speed control valve
7. Water hammering reducer
 $\varnothing 0.8-\varnothing 1-\varnothing 1.2$



OVERALL DIMENSION



DESCRIPTION

Solenoid valve 2 way normally open with servo-assisted piston

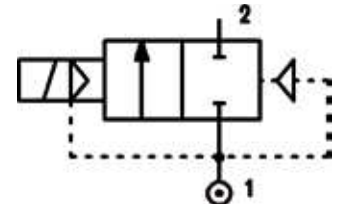
CONSTRUCTION

Body and cover	Brass
Armature tube	Brass
Plunger and core	Stainless steel
Springs	Stainless steel
Piston	Brass
Piston seal	PTFE reinforced
Seal material	Main seal PTFE, other FPM



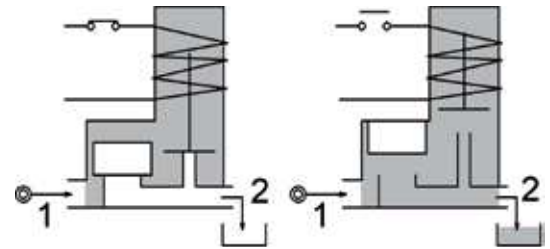
FEATURES

- Minimum differential pressure 1 bar
- Maximum allowable pressure 40 bar
- Maximum fluid viscosity 25cSt (mm²/s)
- Ambient temperature: with class F coil -10°C +55°C
with class H coil -10°C +80°C
- Preferred mounting position with vertical coil above



4

- OPTIONS:** Electroless nickel plating
Stainless steel armature tube



CODE ①	Connection G ISO 228	Orifice mm	Kv m ³ /h	Differential pressure bar			Nominal power			Coil		Seal	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
E219CV12///...	3/8"	12	2	1	25	25	20	15	10	2	30	PTFE/ FPM	-10 +90
E219DV12///...	1/2"	12	2.2	1	25	25							

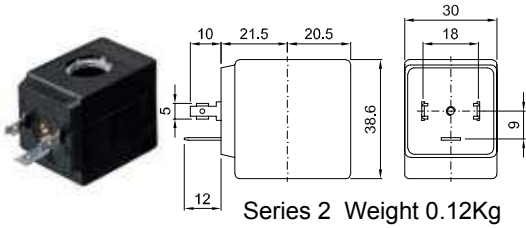
① Seal

Example: E219DV12/1/521 FPM seal
Coil 24V DC
Maximum differential pressure 50bar

COILS	Alternating Current 50/60Hz Volt							Direct Current Volt			Electrical connection	Connectors
	12	24	48	110	220 230	240	380	12	24	48		
Series 2 Width 30 Code ②	20A	20B	20C	20D	20E	20F	20G	200	201	202	DIN 43650A	PG9 code 10349000

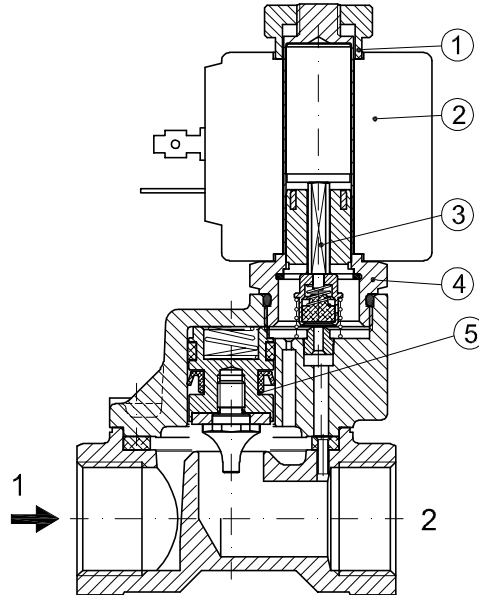
DESCRIPTION
 Insulation class
 Series 2 =F Series 5=H
 Voltage tolerance
 AC +15% -10%
 DC ± 10%
 Protection class
 IP65 with connector fitted
 IP00 without connector
 Continuous service ED100%

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

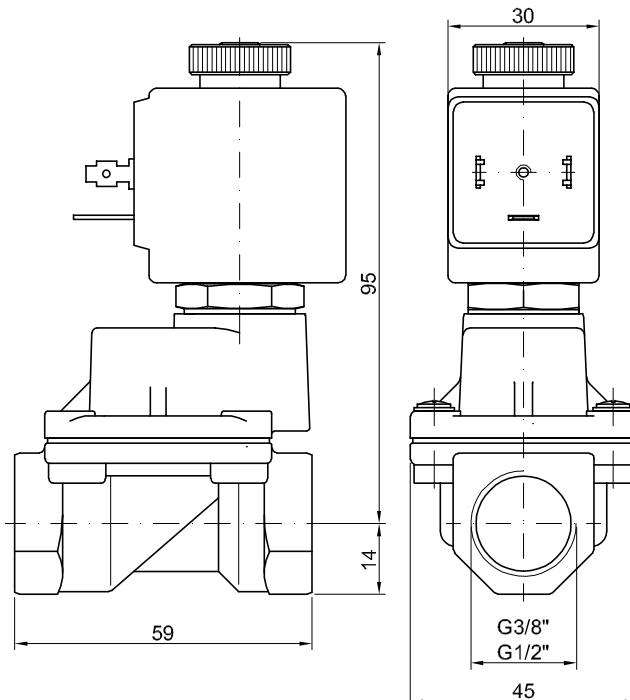


SPARE PARTS LIST

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



OVERALL DIMENSION



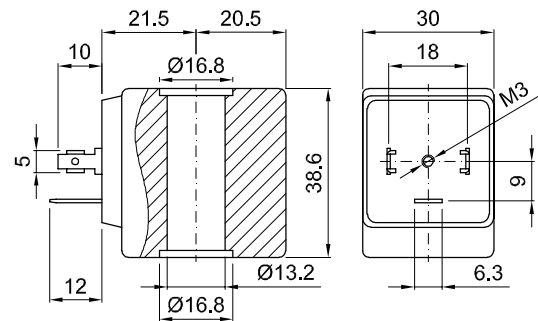
Weight=0.63Kg

DESCRIPTION

Encapsulated coil incorporating the magnetic circuit.
 Fixing by means of a central nut.
 Electrical connection according to DIN 43650 A.


CONSTRUCTION

Encapsulation:
 Class F Fibre-glass Nylon
 Class H Fibre-glass Polyarylamide
 Magnetic circuit Zinc-plated steel
 Windings Copper covered with class H insulation



OPTIONS: Electrical connection through cable
 Special powers and voltages
 Self-extinguish

Certified versions  **US**

CODE		Alternating current Frequency 50/60Hz Voltage Volt	Direct current Voltage Volt	Power ①		Voltage tolerance		Connector	Service ED
Insulation class F	Insulation class H			Alternating Current VA	Direct Current W	Alternating Current	Direct Current		
20A	22A	12	-	15	10	+15%	±10%	10349000	100%
20B	22B	24	-						
20C	22C	48	-						
20D	22D	110	-						
20E	22E	220/230	-			-10%		10349060	
20F	22F	240	-						
20G	22G	380	-						
200	220	-	12			C  US		10349001	
201	221	-	24						
202	222	-	48						
-	U25D	120V 60Hz							
-	U25E	230V 60Hz							

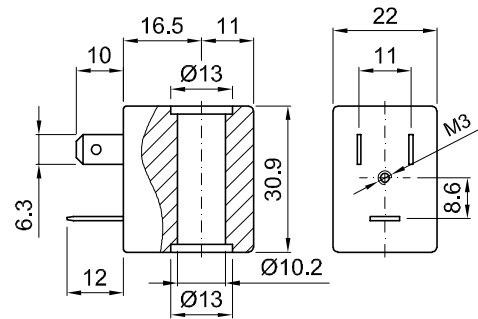
① Considering nominal voltage and an ambient temperature of 20°C

DESCRIPTION

Encapsulated coil incorporating the magnetic circuit.
 Fixing by means of a central nut.
 Electrical connection according to DIN 43650 B.

CONSTRUCTION

Encapsulation:
 Class F Fibre-glass Nylon
 Class H Fibre-glass Polyarylamide
 Magnetic circuit Zinc-plated steel
 Windings Copper covered with
 class H insulation



OPTIONS: Electrical connection through cable
 Special powers and voltages
 Self-extinguish

Certified versions **C RU US** **VDE**

CODE		Alternating current Frequency 50/60Hz Voltage Volt	Direct current Voltage Volt	Power ①		Voltage tolerance		Connector	Service ED
Insulation class F	Insulation class H			Alternating Current VA	Direct Current W	Alternating Current	Direct Current		
30A	32A	12	-	8	6.5	+15%	±10%	10348000	100%
30B	32B	24	-						
30C	32C	48	-						
30D	32D	110	-						
30E	32E	220/230	-						
30F	32F	240	-						
30G	32G	380	-						
300	320	-	12						
301	321	-	24						
302	322	-	48						
-	U35D	120V 60Hz	C RU US						
-	U35E	230V 60Hz							
	V32E	220/230	VDE						

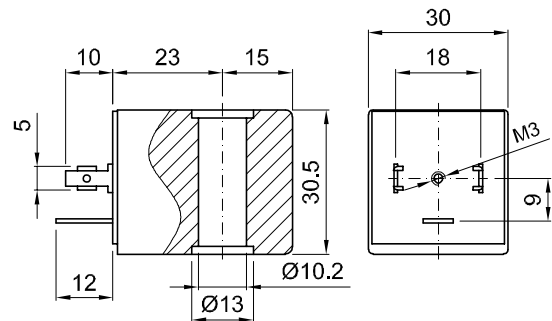
① Considering nominal voltage and an ambient temperature of 20°C

DESCRIPTION

Encapsulated coil incorporating the magnetic circuit.
 Fixing by means of a central nut.
 Electrical connection according to DIN 43650 A.

CONSTRUCTION

Encapsulation:
 Class F Fibre-glass Nylon
 Class H Fibre-glass Polyarylamide
 Magnetic circuit Zinc-plated steel
 Windings Copper covered with class H insulation



OPTIONS: Electrical connection through cable
 Special powers and voltages
 Self-extinguish

CODE		Alternating current Frequency 50/60Hz Voltage Volt	Direct current Voltage Volt	Power ①		Voltage tolerance		Connector	Service ED
Insulation class F	Insulation class H			Alternating Current VA	Direct Current W	Alternating Current	Direct Current		
40A	42A	12	-	8	6.5	+15%	±10%	10348000	100%
40B	42B	24	-						
40C	42C	48	-						
40D	42D	110	-						
40E	42E	220/230	-			-10%			
40F	42F	240	-						
40G	42G	380	-						
400	420	-	12						
401	421	-	24						
402	422	-	48						

① Considering nominal voltage and an ambient temperature of 20°C

DESCRIPTION

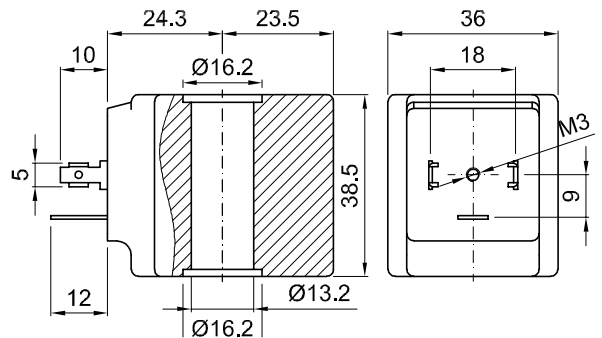
Encapsulated coil incorporating the magnetic circuit.
 Fixing by means of a central nut.
 Electrical connection according to DIN 43650 A.

CONSTRUCTION

Encapsulation:
 Class H Fibre-glass Polyarylamide

Magnetic circuit Zinc-plated steel

Windings Copper covered with
 class H insulation



OPTIONS: Electrical connection through cable
 Special powers and voltages
 Self-extinguish

CODE	Alternating current Frequency 50/60Hz Voltage Volt	Direct current Voltage Volt	Power ①		Voltage tolerance		Connector	Service ED
			Alternating Current VA	Direct Current W	Alternating Current	Direct Current		
52A	12	-	30	27	+15%	±10%	10349000	100%
52B	24	-						
52C	48	-						
52D	110	-						
52E	220/230	-						
52F	240	-						
52G	380	-						
520	-	12						
521	-	24						
522	-	48						

① Considering nominal voltage and an ambient temperature of 20°C

DESCRIPTION

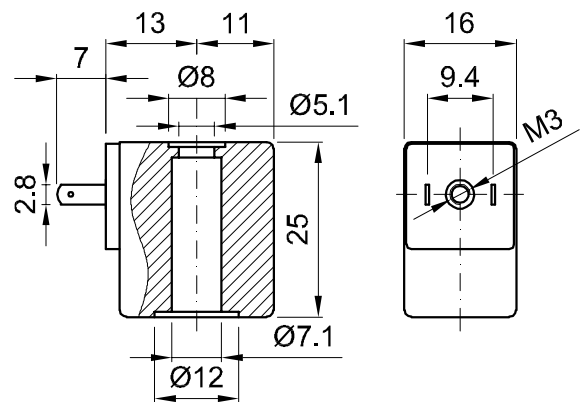
Encapsulated coil incorporating the magnetic circuit.
 Fixing by means of a central nut.
 Electrical connection according to AMP 2.8x0.5.

CONSTRUCTION

Encapsulation:
 Class F Fibre-glass Nylon

Magnetic circuit Zinc-plated steel

Windings Copper covered with
 class H insulation



OPTIONS: Electrical connection through cable
 Special powers and voltages
 Self-extinguish

CODE	Direct current Voltage		Power ①	Voltage tolerance	Connector	Service
	Insulation class F	Volt				
60014		12	4	±5%	10348040	100%
60048		12	8			25%
60114		24	4			100%
60148		24	8			25%
60012		12	2			100%
60112		24	2			100%

① Considering nominal voltage and an ambient temperature of 20°C

DESCRIPTION

Encapsulated coil in self-extinguish nylon incorporating a thermal resistor and a thermal fuse.

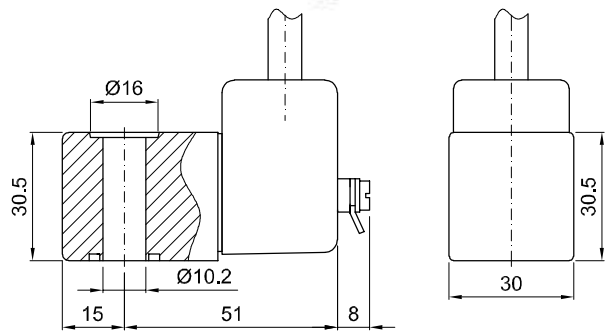
This design prevents any problems of overheating or sparking occurring making it particularly suitable for use in potentially explosive ambient.

CONSTRUCTION

Encapsulation: Class F Self-extinguish Nylon

Magnetic circuit Zinc-plated steel

Windings Copper covered with class H insulation



ELECTRICAL CONNECTION

3-core cable length=300cm

AMBIENT TEMPERATURE

-20°C ÷ +40°C

CERTIFICATE

Conforms to the European standards for the manufacturing of electrical components for use in potentially explosive atmospheres.

EN 50014-1997+ A1...A2

E50025-1997, IEC 60079-18:2002

European Community Standard 97/9/CE

**EEx m II T4 INERIS 06ATEX0002X
CE 0080 Ex II 2 GD**

CODE	VOLTAGE	FREQUENCY	POWER ①
	Volt	Hz	W
75BD	24	50-60	5.3
75CD	48	50-60	5.3
75DD	110	50-60	5.2
75ED	230	50-60	5.2
751D	24 DC	-	5.4

① Considering nominal voltage and an ambient temperature of 20°C