

**DESCRIPTION**

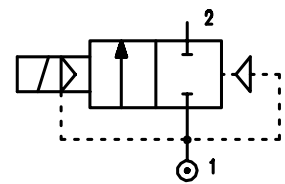
Solenoid valve 2 way with servo-assisted diaphragm bi-stable.

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.



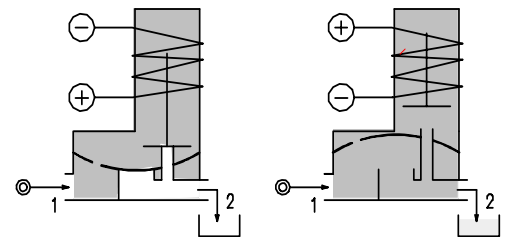
**CONSTRUCTION**

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



**FEATURES**

- Minimum differential pressure 0.15 bar
- Maximum allowable pressure 25 bar
- Maximum fluid viscosity 25cSt (mm<sup>2</sup>/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 :** Special coil powers  
Certified versions:

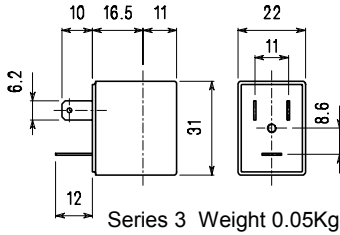


CODE ① ②	Connection G ISO 228	Orifice mm	KV m <sup>3</sup> /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
D117B.....10///.....	1/4"	10	1.5	0.15	-	8	-	-	2	3	22	NBR=B	-10 +90
		10	1.5	0.15	-	15	-	-	5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

- ① Seal
- ② Coil

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

COIL	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

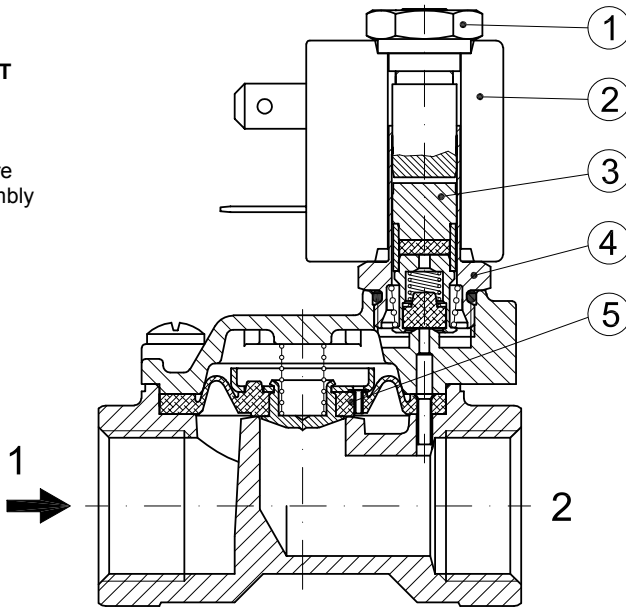


**DESCRIPTION**  
 Class F insulation  
 Voltage tolerance  $\pm 10\%$   
 Protection class  
 IP65 with connector fitted  
 IP00 without connector

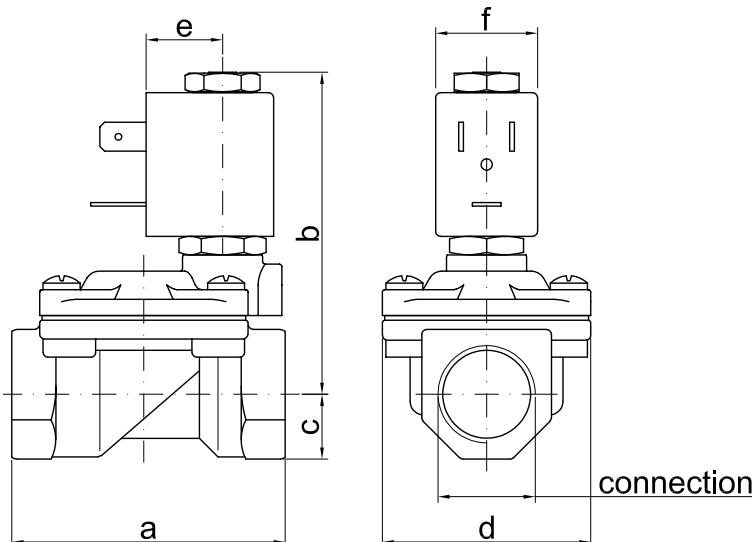
**OPTIONS**  
 Class H insulation  
 Cable attached  
 Special coil voltages  
 Special coil powers

**SPARE PARTS LIST**

1. Coil fixing nut
2. Coil
3. Plunger
4. Armature 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	0.25
G3/8" Ø10	49	65	11	32	16	22	0.25
G3/8" Ø12	59	70	14	45	16	22	0.45
G1/2"	59	70	14	45	16	22	0.40
G3/4"	79	74	18	55	16	22	0.66
G1"	96	85	20	72	16	22	1.05
G1"1/4 Ø30	119	92	25	85	16	22	1.80

**DESCRIPTION**

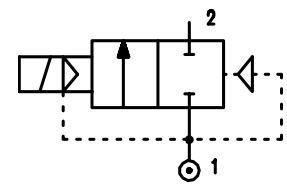
Solenoid valve 2 way with servo-assisted diaphragm bi-stable.

The bi-stable function is achieved by the use of a polarized permanent magnet energising the coil with a DC current for at least 15ms in the reverse direction of the preceding impulse.



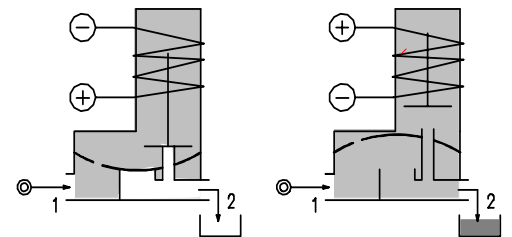
**CONSTRUCTION**

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



**FEATURES**

- Minimum differential pressure 0.15÷3 bar
- Maximum allowable pressure 20 bar
- Maximum fluid viscosity 25cSt (mm<sup>2</sup>/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 <sup>3</sup> /h	Differential pressure bar			Nominal power			Coil		Seal ①	Temp. range °C
				Min	Max		AC Inrush	VA Holding	DC Watt	Series	Width		
					AC	DC							
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						EPDM=E	<+120
D117I.....50///.....	2"	50	36	0.15	-	10						FPM=V	-10 +120
D117MB75///.....	2"1/2	75	75	0.3	-	5	-	-	10	2	30	NBR=B	-10 +90
D117RB75///.....	3"	75	84	0.3	-	5							
③D117MB75/W/.....	2"1/2	75	75	3	-	10							
③D117RB75/W/.....	3"	75	84	3	-	10							

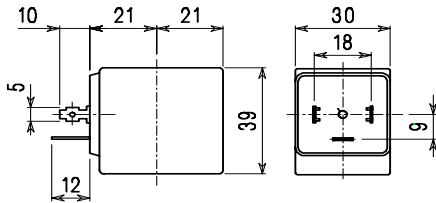
- ① Seal
  - ② Coil
  - ③ Reinforced diaphragm
- Example: D117IB50///201 NBR seal  
Coil 24V DC

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

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

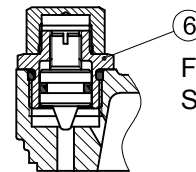
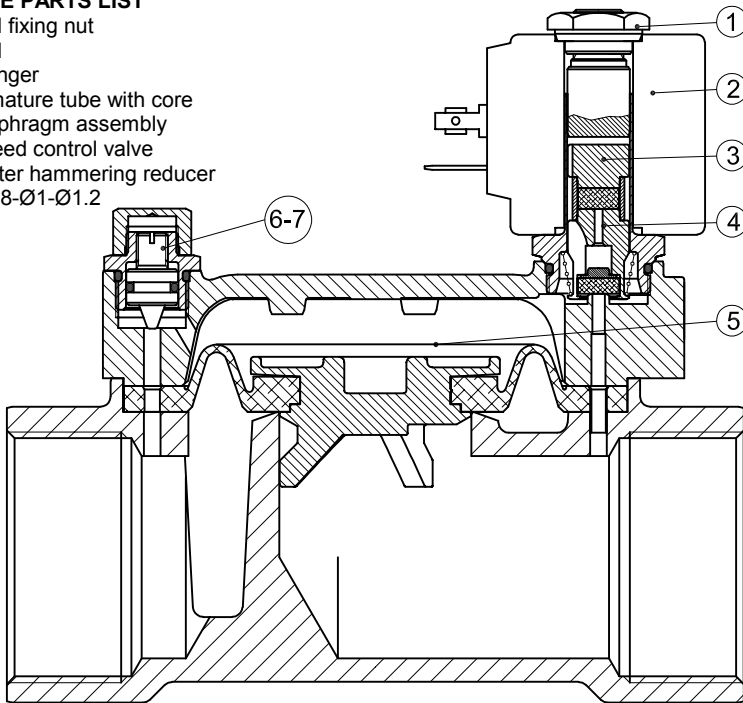
**OPTIONS**  
 Class H insulation  
 Cable attached  
 Special coil voltages  
 Special coil powers



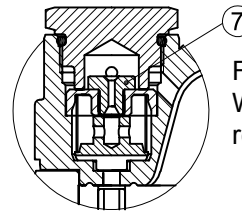
Series 2 Weight 0.12Kg

### SPARE PARTS LIST

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

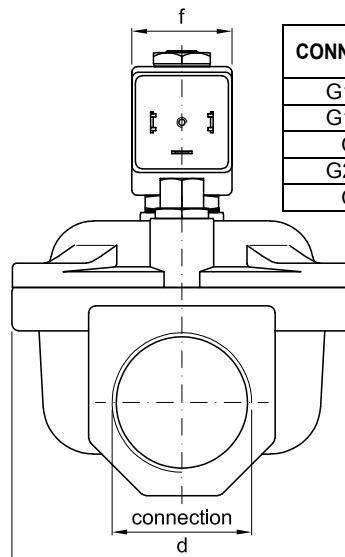
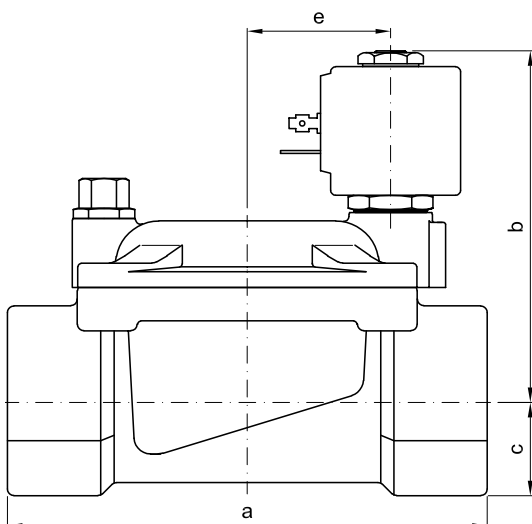


FOR G1"1/4-1"1/2-2"  
 Speed control valve



FOR G2"1/2-3"  
 Water hammering reducer

### OVERALL DIMENSION



CONNECTION	a	b	c	d	e	f	Weight Kg
G1"1/4	142	107	28	102	21	30	2.95
G1"1/2	142	107	28	102	21	30	2.74
G2"	158	117	35	119	21	30	4.32
G2"1/2	226	134	51	169	21	30	10
G3"	226	134	51	169	21	30	9.65