

### DESCRIPTION

Solenoid valve 2 way normally closed  
direct acting poppet type

### CONSTRUCTION

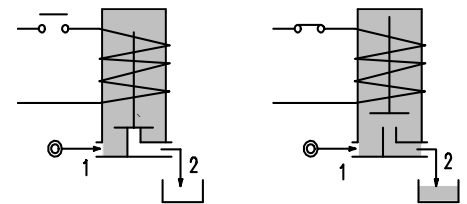
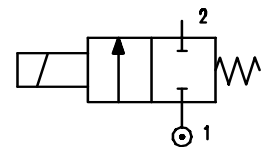
|                  |                 |
|------------------|-----------------|
| Body             | Brass           |
| Armature tube    | Stainless steel |
| Plunger and core | Stainless steel |
| Springs          | Stainless steel |
| Seal material    | NBR             |
|                  | FPM   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



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### FEATURES

Maximum allowable pressure 5 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  
Universal mounting position



**OPTIONS :** Electroless nickel plating  
Version for use with oxygen

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

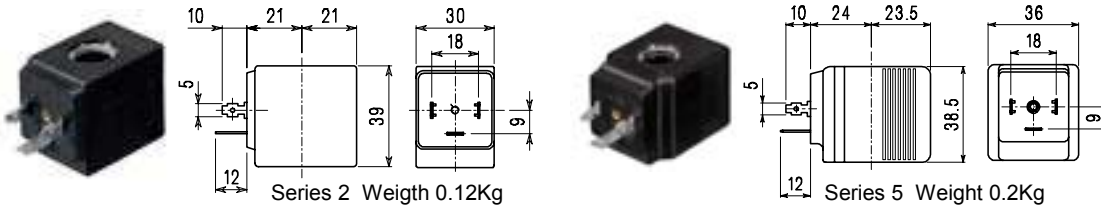
- ① Seal
- ② Coil

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

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

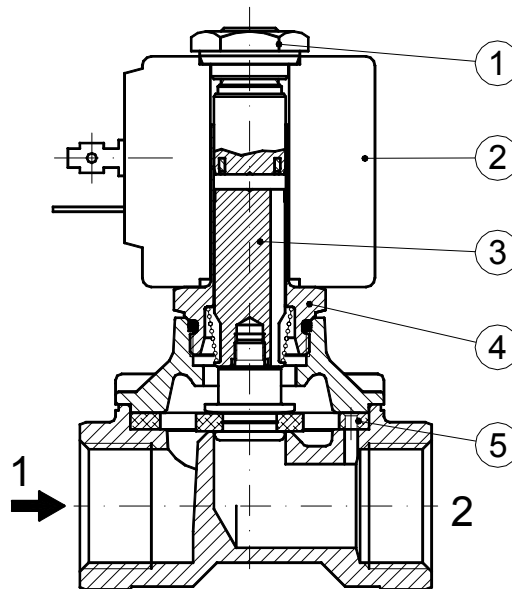
**DESCRIPTION**  
 Insulation class  
 Series 2=F Series 5=H  
 Voltage tolerance  
 AC +15% -10%  
 DC ± 10%  
 Protection class  
 IP65 with connector fitted  
 IP00 without connector  
 Continuous service ED100%

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

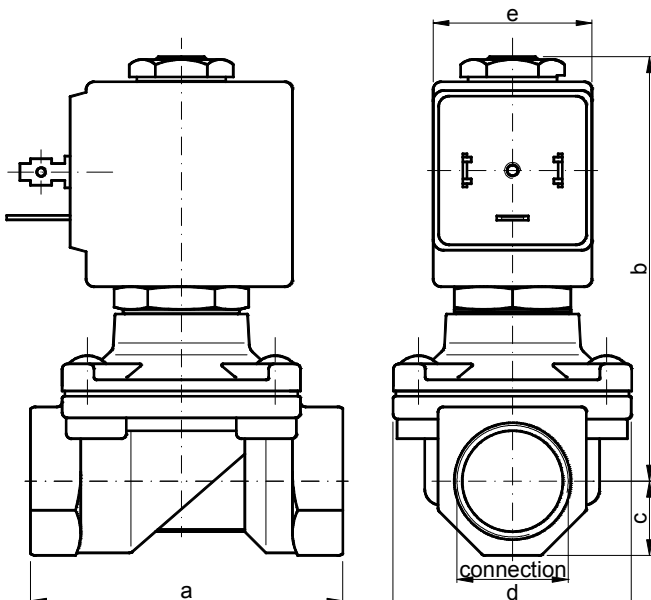


### SPARE PARTS LIST

1. Coil fixing nut
2. Coil
3. Plunger
4. Armature tube with core
5. Body O-Ring



### 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     |