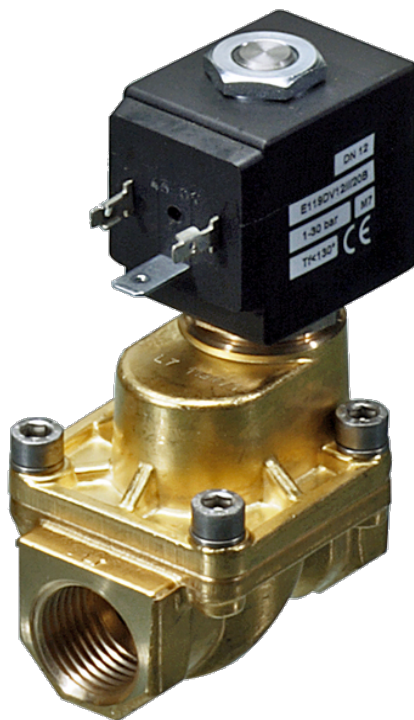


# 119 Series Valves



800.909.4988  
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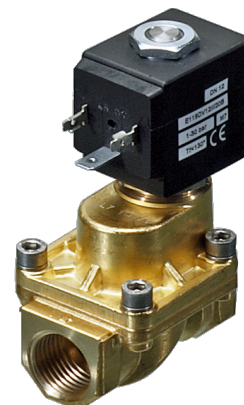
**RANKIN**   
COMPONENTS THAT AUTOMATE

## DESCRIPTION

Solenoid valve 2 way normally closed with servo-assisted piston

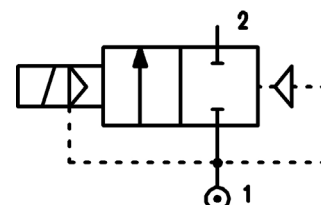
## CONSTRUCTION

|                  |                           |
|------------------|---------------------------|
| Body and cover   | Brass                     |
| Armature tube    | AISI 303                  |
| Plunger and core | AISI 430FR                |
| Springs          | AISI 302                  |
| Piston           | AISI 303                  |
| Piston seal      | PTFE reinforced           |
| Seal material    | Main seal PTFE, other FPM |



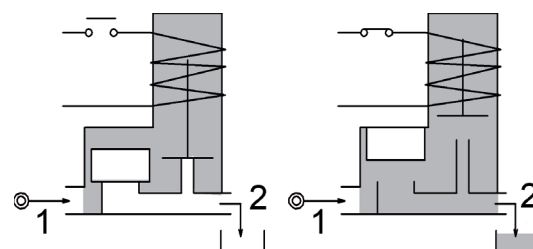
## FEATURES

- Minimum differential pressure 1bar
- Maximum allowable pressure PS 60bar<sup>③</sup>
- Maximum fluid viscosity 25cSt (mm<sup>2</sup>/s)
- Ambient temperature: from -10°C to +80°C according to the coil
- Preferred mounting position with vertical coil above



4

**OPTIONS:** Electroless nickel plating  
 c  us certified coils



| CODE<br>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         | Temp.<br>range<br>°C |
|----------------|----------------------------|---------------|-------------------------|------------------------------|-----|----|---------------|---------------|------------|--------|-------|--------------|----------------------|
|                |                            |               |                         | Min                          | Max |    | AC<br>Inrush  | VA<br>Holding | DC<br>Watt | Series | Width |              |                      |
|                |                            |               |                         |                              | AC  | DC |               |               |            |        |       |              |                      |
| E119BV52///... | 1/4"                       | 5.2           | 0.47                    | 1.5                          | 50  | 50 | 20            | 15            | 10         | 2      | 30    | PTFE/<br>FPM | -10 +140             |
| E119CV12///... | 3/8"                       | 12            | 2                       | 1                            | 30  | 30 |               |               |            |        |       |              |                      |
| E119DV12///... | 1/2"                       | 12            | 2.2                     | 1                            | 30  | 30 |               |               |            |        |       |              |                      |
| E119CV12/1/... | 3/8"                       | 12            | 2                       | 1                            | 50  | 50 | 40            | 30            | 27         | 5      | 36    |              |                      |
| E119DV12/1/... | 1/2"                       | 12            | 2.2                     | 1                            | 50  | 50 |               |               |            |        |       |              |                      |

② Coil

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

Maximum allowable leakage <0.2NI/h

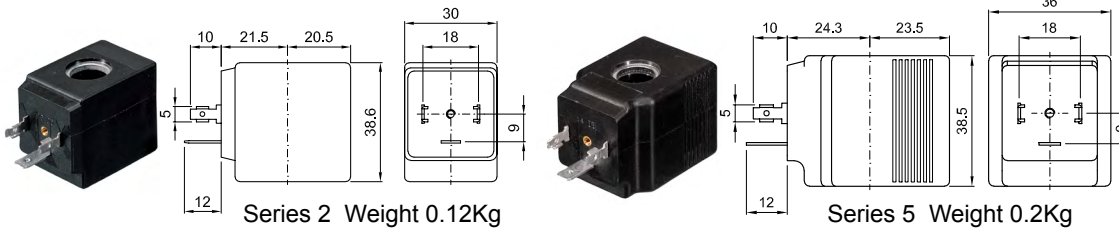
③ The maximum allowable pressure PS for steam 2,5bar (gauge pressure)

| COILS<br>②           | Alternating Current 50/60Hz<br>(V) |     |     |     |            |     |     | Direct Current<br>(V) |     |     | Electrical<br>connection | Connectors               |
|----------------------|------------------------------------|-----|-----|-----|------------|-----|-----|-----------------------|-----|-----|--------------------------|--------------------------|
|                      | 12                                 | 24  | 48  | 110 | 220<br>230 | 240 | 380 | 12                    | 24  | 48  |                          |                          |
| Series 2<br>Width 30 | 20A                                | 20B | 20C | 20D | 20E        | 20F | 20G | 200                   | 201 | 202 | DIN 43650A               | PG9<br>code<br>10349000  |
| Series 5<br>Width 36 | 52A                                | 52B | 52C | 52D | 52E        | 52F | 52G | 520                   | 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 voltage  
 Special coil powers  
 CE certified coils

(for coil details see section 8)

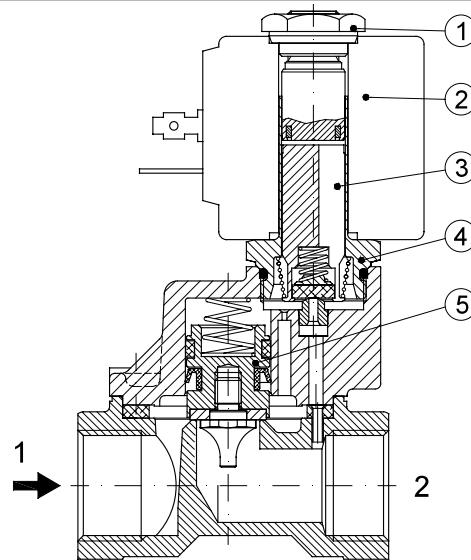


Series 2 Weight 0.12Kg

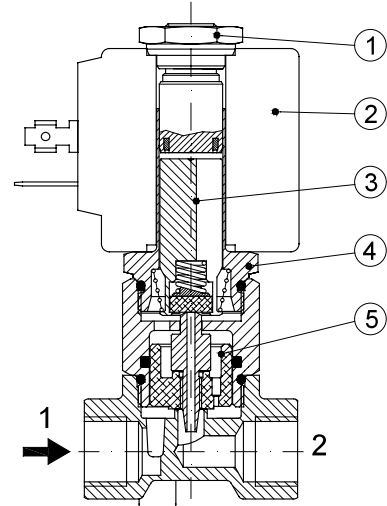
Series 5 Weight 0.2Kg

### SPARE PARTS LIST

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



E119CV12 - E119DV12



E119BV52///...

### OVERALL DIMENSION

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

