

# SOLENOID VALVES | GEM-SOL® | General Purpose

## Direct Operated

### GEM-SOL® | A22 (G80-A)

2 Way NC, NO

#### Technical Data

|                                 |                                                                                                                                                                                                                                     |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Function                        | 2 Way NC, NO                                                                                                                                                                                                                        |
| Ports size                      | 1/8" BSP, NPT, M5                                                                                                                                                                                                                   |
| Orifice size                    | See table                                                                                                                                                                                                                           |
| Pressure range                  | <ul style="list-style-type: none"> <li>• See table</li> <li>• Valves for pressure higher than 12 bar cannot be supplied with manual override</li> </ul>                                                                             |
| Kv (l/min)                      | See table                                                                                                                                                                                                                           |
| Temperature range               | <b>Fluid</b> : -10°C to 80°C (no freezing)<br><b>Ambient</b> : -10°C to 50°C                                                                                                                                                        |
| Materials in contact with media | <b>Main Valve:</b><br>Aluminium, Stainless Steel AISI 316, Brass<br><b>Solenoid Operator *</b><br>Stainless Steel AISI 300 & 400 series, Brass<br>* Standard operators are Stainless Steel<br><b>Seals:</b><br>NBR, FKM, EPDM, FFKM |
| Media                           | Air, water, oil                                                                                                                                                                                                                     |
| Coil voltage                    | <ul style="list-style-type: none"> <li>• Voltage and power consumption - see table</li> <li>• All Baccara coil voltages are <math>\pm 10\%</math> of nominal</li> </ul>                                                             |
| Standard protection class       | IP65 with connector                                                                                                                                                                                                                 |



Brass



Stainless Steel



Aluminium

#### Max. Pressure (bar) 2 Way NC

| Coil<br>Current/Power | Orifice (mm) |      |     |     |     |
|-----------------------|--------------|------|-----|-----|-----|
|                       | 1.0          | 1.2  | 1.6 | 2.0 | 2.4 |
| AC - 75W              | 40           | 35   | 35  | 12  | 10  |
| AC - 5W               | 40           | 30   | 15  | 8   | 6   |
| DC - 6W               | 40           | 35   | 20  | 12  | 10  |
| DC - 3W               | 40           | 30   | 15  | 5   | 4   |
| Flow factor Kv(l/min) | 0.5          | 0.65 | 1.2 | 1.6 | 2   |

#### Max. Pressure (bar) 2 Way NO

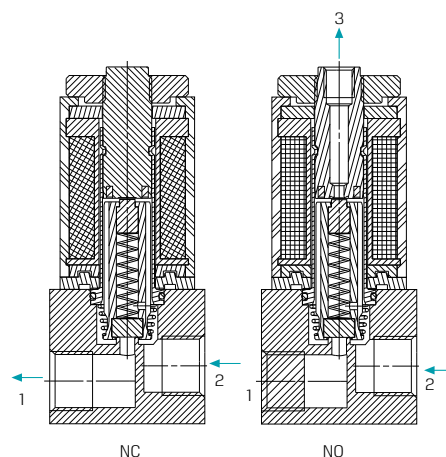
| Coil<br>Current/Power | Orifice (mm) |     |
|-----------------------|--------------|-----|
|                       | 1.2          | 1.6 |
| AC - 5W               | 15           | 10  |
| DC - 3W               | 15           | 10  |
| Flow factor Kv(l/min) | 0.4          | 0.7 |

#### Voltage & Power Consumption

|     | AC (W) |   |       |   | DC (W) |   |
|-----|--------|---|-------|---|--------|---|
|     | 50 Hz  |   | 60 Hz |   |        |   |
| V   | 7.5    | 5 | 6     | 3 | 6      | 3 |
| 6   |        |   |       |   | •      | • |
| 12  | •      | • | •     | • | •      | • |
| 24  | •      | • | •     | • | •      | • |
| 110 | •      | • | •     | • |        |   |
| 230 | •      | • | •     | • |        |   |

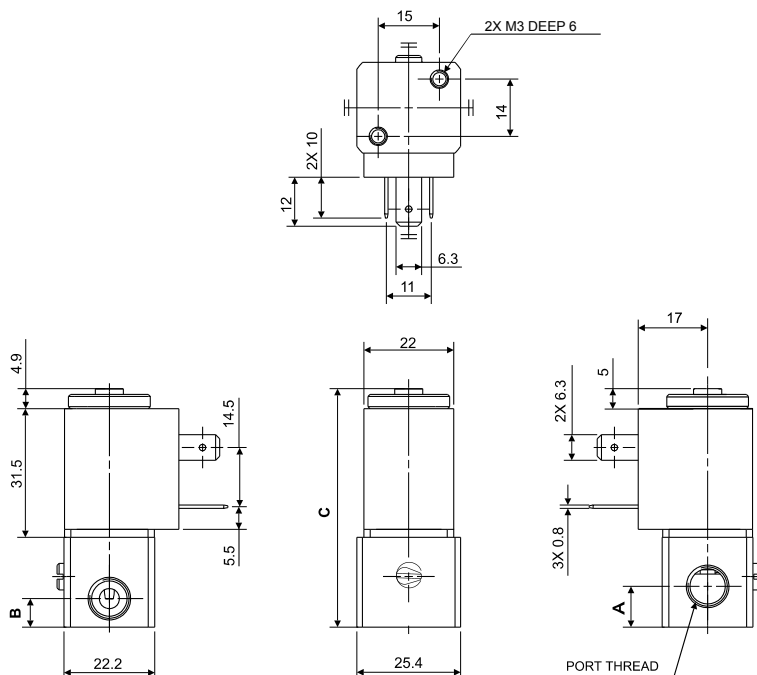
#### Available options

- Standard
- Special



## GEM-SOL® | A22 (G80-A) | 2 Way NC, NO

### Dimensions



| Port thread | A   | B | C    |
|-------------|-----|---|------|
| M5          | 5.5 | 4 | 51.5 |
| 1/8"        | 10  | 7 | 58.5 |

### How to Order

\* When ordering without coil, please define what current and pressure rating is needed (DC, AC)

| G80-A | BODY <sup>(1)</sup> |   | PORT     |    | FUNCTION |   | ORIFICE            |   | SEALS                |   | MANUAL<br>OVERRIDE |   | VOLTAGE           |   | POWER       |   | CONNECTOR              |   |
|-------|---------------------|---|----------|----|----------|---|--------------------|---|----------------------|---|--------------------|---|-------------------|---|-------------|---|------------------------|---|
|       | Aluminium *         | 1 | M5 *     | 00 | 2W NC    | 1 | 1.0                | 1 | NBR                  | N | None               | 0 | without coil      | 0 | No coil     | 0 | with                   | 1 |
|       | Brass               | 2 | 1/8" BSP | 10 | 2W NO    | 2 | 1.2                | 2 | FKM                  | V |                    |   | 6 <sup>(4)</sup>  | 1 | AC7.5W 50Hz | 1 | flying leads<br>coil * | 4 |
|       | Stainless<br>Steel  | 3 | 1/8" NPT | 11 |          |   | 1.6                | 3 | EPDM                 | E |                    |   | 12                | 2 | AC6W 60Hz   | 2 |                        |   |
|       |                     |   |          |    |          |   | 2.0 <sup>(2)</sup> | 4 | FFKM* <sup>(3)</sup> | K |                    |   | 24 <sup>(5)</sup> | 3 | DC6W        | 3 |                        |   |
|       |                     |   |          |    |          |   | 2.4 <sup>(2)</sup> | 5 |                      |   |                    |   | 110               | 5 | AC5W 50Hz   | 4 |                        |   |
|       |                     |   |          |    |          |   |                    |   |                      |   |                    |   | 230               | 7 | AC3W 60Hz   | 5 |                        |   |
|       |                     |   |          |    |          |   |                    |   |                      |   |                    |   | other             | 9 | DC3W        | 7 |                        |   |

\* **SPECIAL OPTIONS** | Extended lead times, Non-stock items, MOQ may be applicable

### Example : G80-A-21011V0-321

GEM-SOL® A22 (G80-A) direct operated, Brass, 1/8", 2W NC, 1.0mm orifice, FKM, no manual override, 24VAC 6W 60Hz, with connector.

(1) For Stainless Steel tube, add "s" : e.g **A22-□s.....**

(2) NC only

(3) FFKM O-ring is available only upon request. When ordering FFKM seals, please consult with our technical sales department about O-ring compound

(4) DC only

(5) Available as standard only in 24VDC 3W and 24VDC 6W.

\* To order valves manufactured according to your specific requirements, please contact our technical sales department.

# SOLENOID VALVES | GEM-SOL® | General Purpose

## Direct Operated

### GEM-SOL® | A22 (G80-A)

## 3 Way NC, NO

### Technical Data

|                                 |                                                                                                                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Function                        | 3 Way NC, NO                                                                                                                                                                                                                 |
| Ports size                      | 1/8" BSP, NPT, M5,                                                                                                                                                                                                           |
| Orifice size                    | See table                                                                                                                                                                                                                    |
| Pressure range                  | <ul style="list-style-type: none"> <li>• See table</li> <li>• Valves for pressure higher than 12 bar cannot be supplied with manual override</li> </ul>                                                                      |
| Kv (l/min)                      | See table                                                                                                                                                                                                                    |
| Temperature range               | <b>Fluid</b> : -10°C to 80°C (no freezing)<br><b>Ambient</b> : -10°C to 50°C                                                                                                                                                 |
| Materials in contact with media | <b>Main Valve:</b><br>Aluminium, Stainless Steel AISI 316, Brass<br><b>Solenoid Operator*</b><br>Stainless Steel AISI 300 & 400 series, Brass<br>* Standard operators are Stainless Steel<br><b>Seals:</b><br>NBR, FKM, EPDM |
| Media                           | Air, water, oil                                                                                                                                                                                                              |
| Coil voltage                    | <ul style="list-style-type: none"> <li>• Voltage and power consumption - see table</li> <li>• All Baccara coil voltages are <math>\pm 10\%</math> of nominal</li> </ul>                                                      |
| Standard protection class       | IP65 with connector                                                                                                                                                                                                          |



Brass



Stainless Steel



Aluminium

### Max. Pressure (bar) 3 Way NC

| Coil<br>Current/Power | Orifice (mm) |      |      |
|-----------------------|--------------|------|------|
|                       | 1.0          | 1.2  | 1.6  |
| AC - 7.5W             | 15           | 12   | 10.5 |
| AC - 5W               | 12           | 10   | 7    |
| DC - 6W               | 15           | 12   | 10.5 |
| DC - 3W               | 12           | 10   | 7    |
| Flow factor Kv(l/min) | 0.5          | 0.65 | 1    |

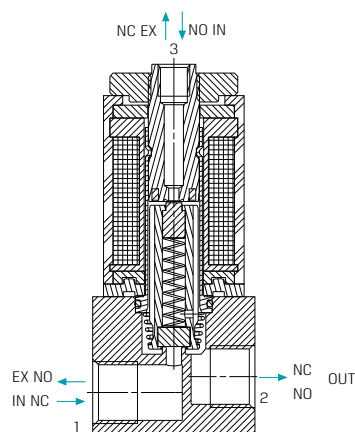
### Max. Pressure (bar) 3 Way NO

| Coil<br>Current/Power | Orifice(mm) |     |
|-----------------------|-------------|-----|
|                       | 1.2         | 1.6 |
| AC - 7.5W             | 12          | 8   |
| AC - 5W               | 10          | 7   |
| DC - 6W               | 12          | 8   |
| DC - 3W               | 10          | 6   |
| Flow factor Kv(l/min) | 0.4         | 0.7 |

### Voltage & Power Consumption

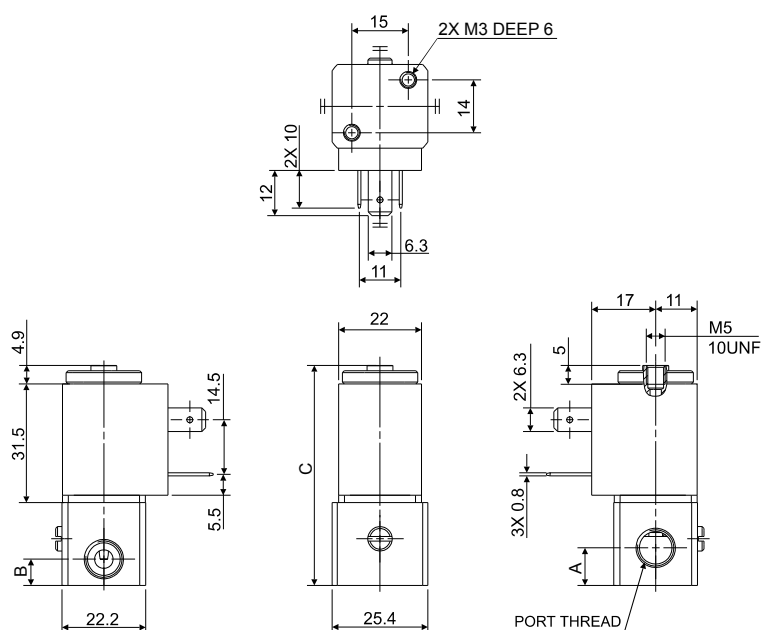
| AC (W) |       |   |       |   | DC (W) |   |
|--------|-------|---|-------|---|--------|---|
|        | 50 Hz |   | 60 Hz |   |        |   |
| V      | 75    | 5 | 6     | 3 | 6      | 3 |
| 6      |       |   |       |   | •      | • |
| 12     | •     | • | •     | • | •      | • |
| 24     | •     | • | •     | • | •      | • |
| 110    | •     | • | •     | • |        |   |
| 230    | •     | • | •     | • |        |   |

• Available options



## GEM-SOL® | A22 (G80-A) | 3 Way NC, NO

### Dimensions



| Port thread | A   | B | C    |
|-------------|-----|---|------|
| M5          | 5.5 | 4 | 51.5 |
| 1/8"        | 10  | 7 | 58.5 |

### How to Order

| G80-A | BODY <sup>(1)</sup> | PORT        | FUNCTION | ORIFICE | SEALS  | MANUAL OVERRIDE | VOLTAGE            | POWER                    | CONNECTOR             |
|-------|---------------------|-------------|----------|---------|--------|-----------------|--------------------|--------------------------|-----------------------|
|       | Aluminium * 1       | M5 * 00     | 3W NC 3  | 1.0 1   | NBR N  | None 0          | without coil 0     | No coil 0                | with 1                |
|       | Brass 2             | 1/8" BSP 10 | 3W NO 4  | 1.2 2   | FKM V  |                 | 6 <sup>(2)</sup> 1 | AC75W 50Hz 1             | flying leads coil * 4 |
|       | Stainless Steel 3   | 1/8" NPT 11 |          | 1.6 3   | EPDM E |                 | 12 2               | AC6W 60Hz 2              |                       |
|       |                     |             |          |         |        |                 | 24 3               | DC6W 3                   |                       |
|       |                     |             |          |         |        |                 | 110 5              | AC5W 50Hz 4              |                       |
|       |                     |             |          |         |        |                 | 230 7              | AC3W 60Hz 5              |                       |
|       |                     |             |          |         |        |                 | other 9            | DC3W 7                   |                       |
|       |                     |             |          |         |        |                 |                    | Latch * <sup>(3)</sup> L |                       |

\* When ordering without coil, please define what current and pressure rating is needed (DC, AC)

\* **SPECIAL OPTIONS** | Extended lead times, Non-stock items, MOQ may be applicable

### Example : G80-A-21032V0-231

GEM-SOL® A22 (G80-A) direct operated, Brass, 1/8" BSP, 3W NC, 1.2 orifice, FKM, no manual override, 12VDC 6W with connector

(1) For Stainless Steel tube add "s" : e.g **A22-□s.....**

(2) DC only

(3) When ordering a latch valve, please contact our technical sales department

\* To order valves manufactured according to your specific requirements, please contact our technical sales department.