

## **FLOW CONTROL VALVES**



**FLOW CONTROL VALVES**

The main characteristic of Flow control valves described in this chapter is that compensator and flow regulator are mounted directly inside the manifold, so that this type of valve is directly installed in the hydraulic circuit.

There are 2 different types of flow control valves, according to the type of adjuster:

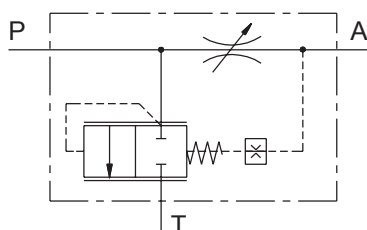
- Electro-proportional flow regulators
- Manual flow regulators

**3 WAYS IN LINE MOUNTED FLOW REGULATORS**

Whatever working pressure is, 3-way flow regulators grant a constant adjustment of oil flow inside an hydraulic line (A), draining excess flow through a third line (T).

Main components are: an flow regulator device and a 2-way NC compensator.

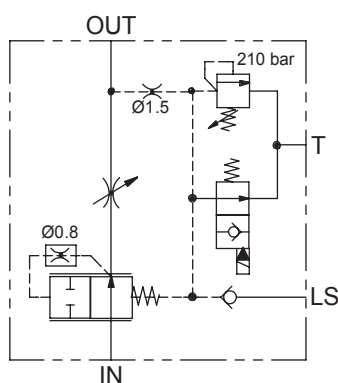
To have an efficient functionality, pressure on third line (T) must be lower than pressure on regulated line (A).



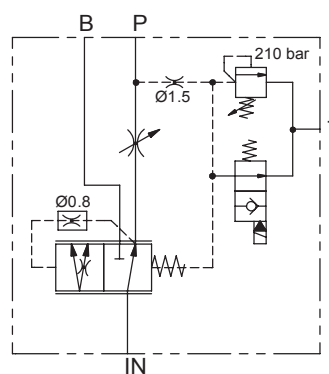
**FLOW REGULATORS FOR EARTH MOVING MACHINES**

Flow regulators for Earth movement machines are hydraulic valves designed to allow the installation of hydraulic hammers, trenchers and/or other hydraulic tools on excavators, backhoes and/or other machines.

Flow regulators for earth moving machines are designed in two different types: 2 way or 3 way valves. They are equipped with: (1) relief valves, to reduce pressure on regulated line; (2) dump electric valves.



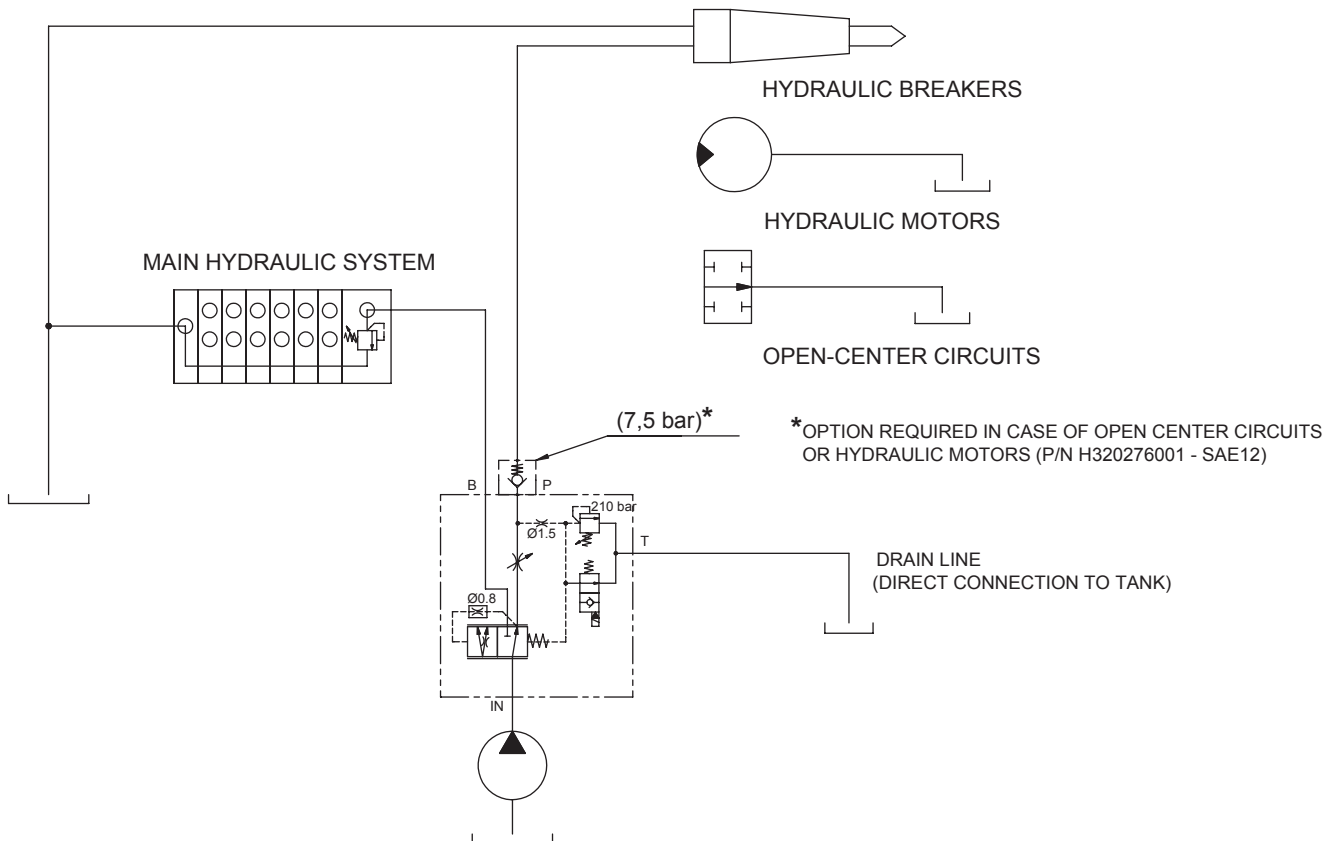
*2 way LS Regulator*



*3 way priority Regulator*

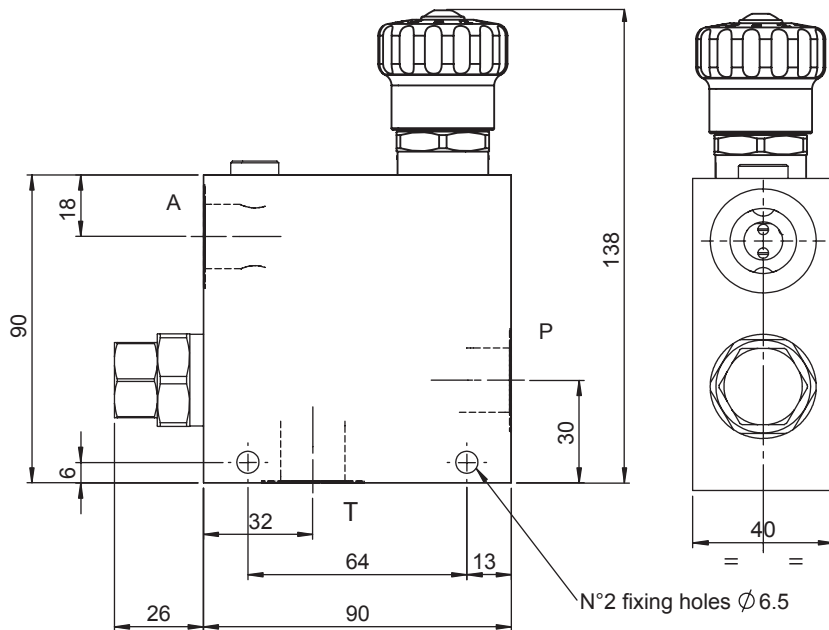
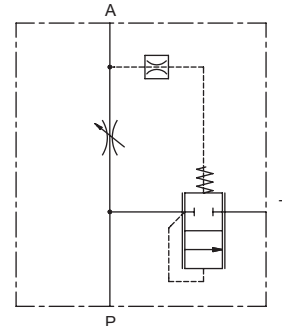
**FLOW CONTROL VALVES**

To have an efficient functionality, when flow control valve is not operating, it is necessary to assure at least 7.5 bar pressure on the regulated port (OUT or P). For applications linked to hydraulic motors or open-centre direct control valves, the installation of a 7.5 bar-pre-loaded uni-directional valve is required.



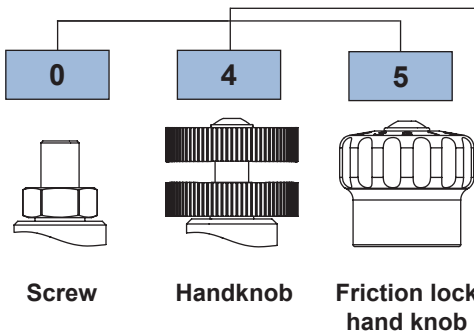
**3 WAYS FLOW CONTROL VALVE, MANUAL CONTROL**

- Max regulated flow ..... **50 l/min**
- Maximum flow ..... **90 l/min**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Weight ..... **1,8 Kg**



**Ordering code**

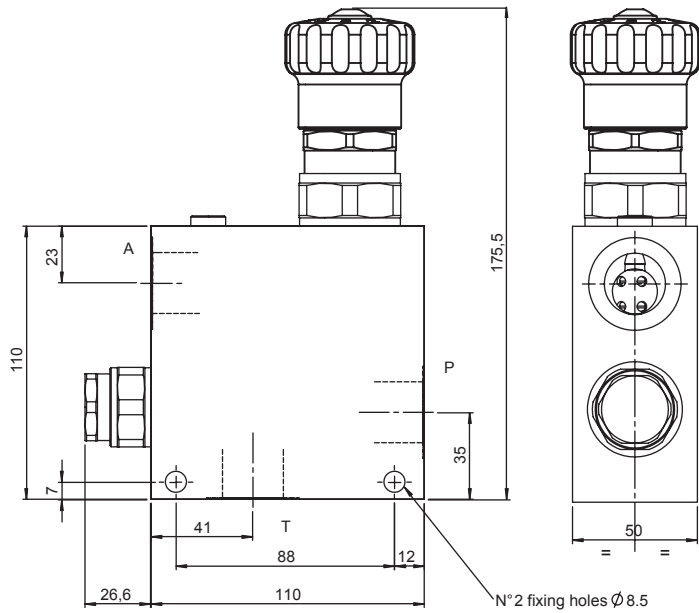
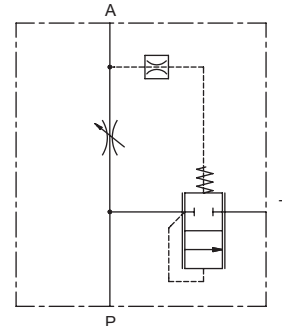
**6 F 3 0 0 [ ] 0 0 S [ ] 0 0 0**



| PORTS | 03     | 04     |
|-------|--------|--------|
| A,P,T | G 3/8" | G 1/2" |

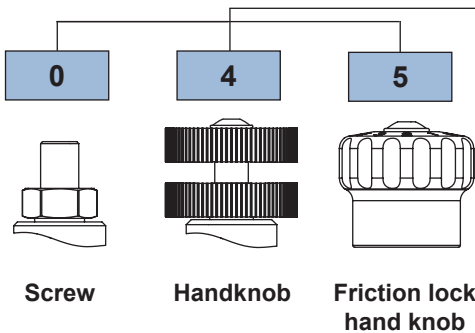
**3 WAYS FLOW CONTROL VALVE, MANUAL CONTROL**

- Max regulated flow ..... **90 l/min**
- Maximum flow ..... **150 l/min**
- Max pressure P:A..... **350 bar**
- Seals..... **NBR**
- Weight ..... **2 Kg**



**Ordering code**

**6 F 3 0 0 [ ] 0 0 S [ ] 0 0 0**

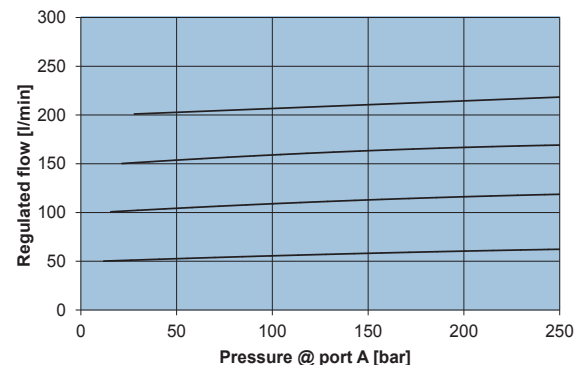
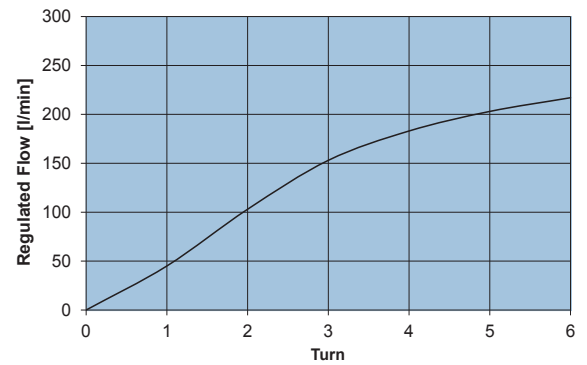
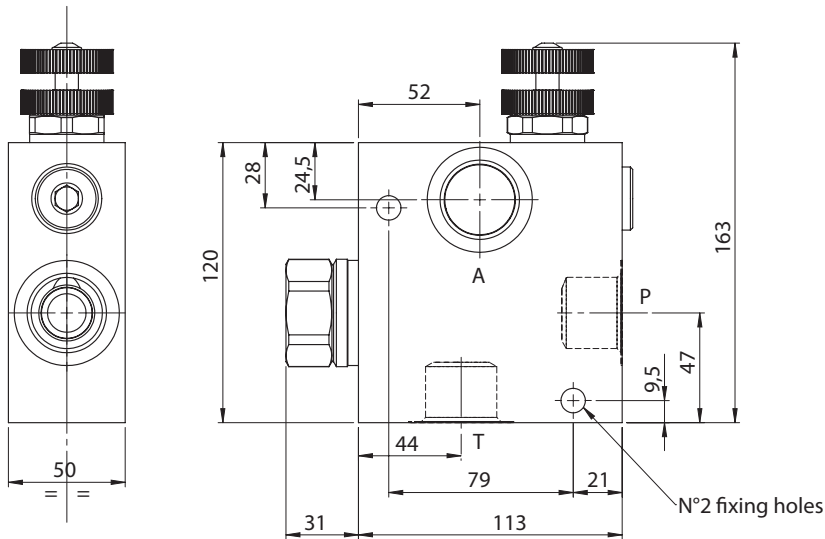
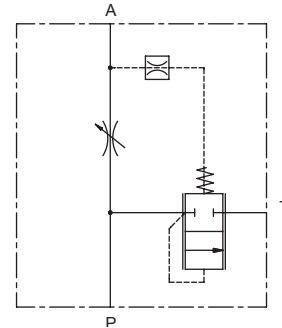


|              |           |
|--------------|-----------|
| <b>PORTS</b> | <b>05</b> |
| A,P,T        | G 3/4"    |



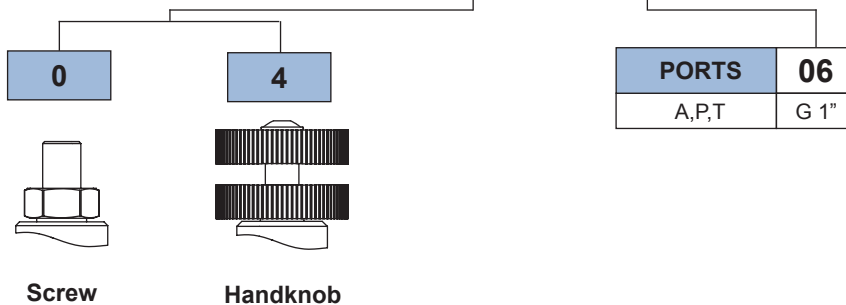
**3 WAYS FLOW CONTROL VALVE, MANUAL CONTROL**

- Max regulated flow ..... **200 l/min**
- Maximum flow ..... **300 l/min**
- Max pressure P:A ..... **210 bar**
- Seals ..... **NBR and PTFE**
- Weight ..... **2,3 Kg**



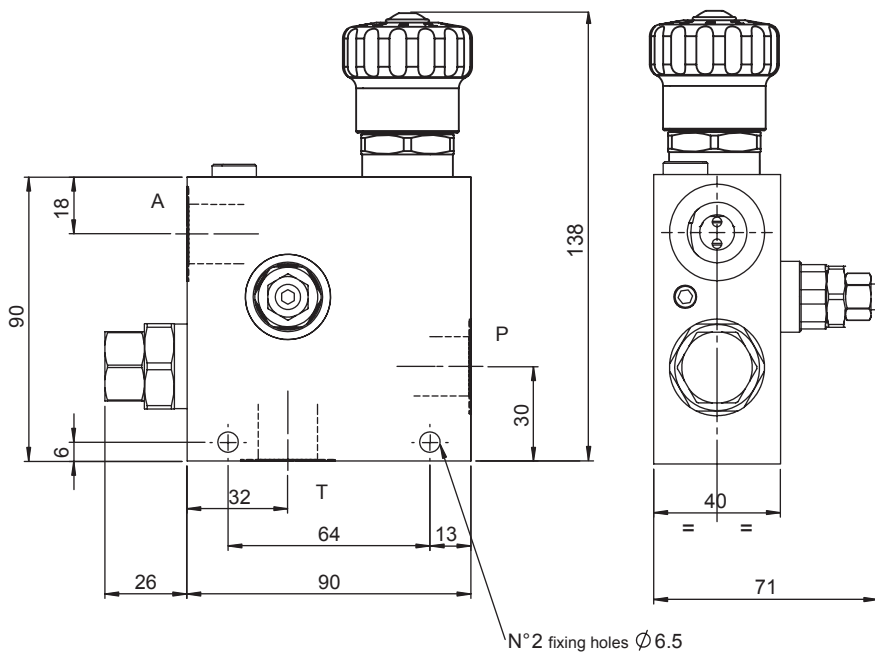
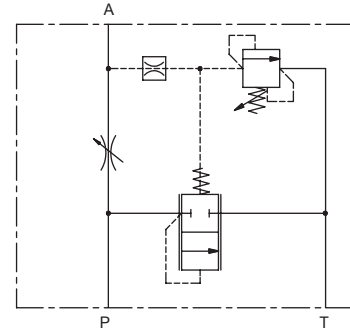
**Ordering code**

**6 F 3 0 0 [ ] 0 0 A [ ] 0 0 0**



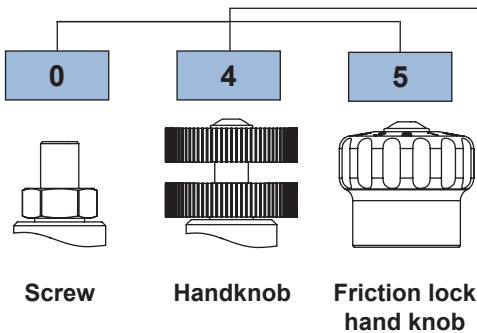
**3 WAYS FLOW CONTROL VALVE, MANUAL CONTROL AND PRESSURE RELIEF VALVE**

- Max regulated flow ..... **50 l/min**
- Maximum flow ..... **90 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Weight ..... **2 Kg**



**Ordering code**

**6 F 3 0 0 [ ] [ ] S [ ] 0 0 0**



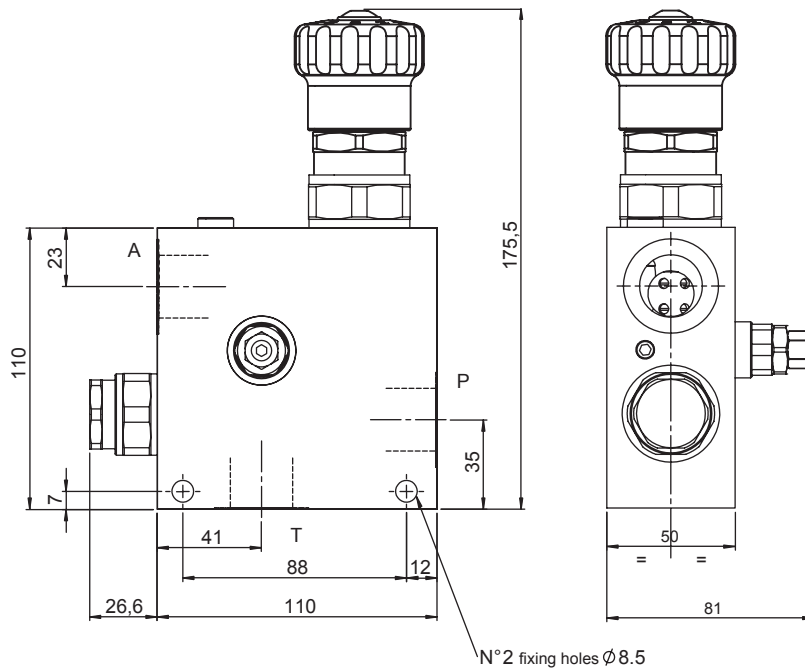
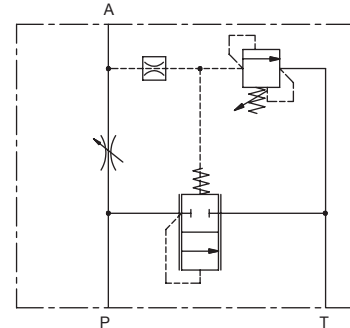
| RELIEF VALVE                   | M2       | M3       |
|--------------------------------|----------|----------|
| Setting range [bar]            | 40 - 220 | 50 - 350 |
| Pressure increase [bar/turn]   | 34       | 63       |
| Standard Setting 4 l/min [bar] | 100      | 200      |

| PORTS | 03     | 04     |
|-------|--------|--------|
| A,P,T | G 3/8" | G 1/2" |



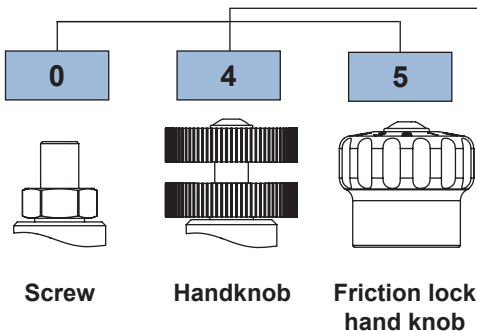
**3 WAYS FLOW CONTROL VALVE, MANUAL CONTROL AND PRESSURE RELIEF VALVE**

- Max regulated flow ..... **90 l/min**
- Maximum flow ..... **150 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Weight ..... **2,2 Kg**



**Ordering code**

**6 F 3 0 0 [ ] [ ] S [ ] 0 0 0**



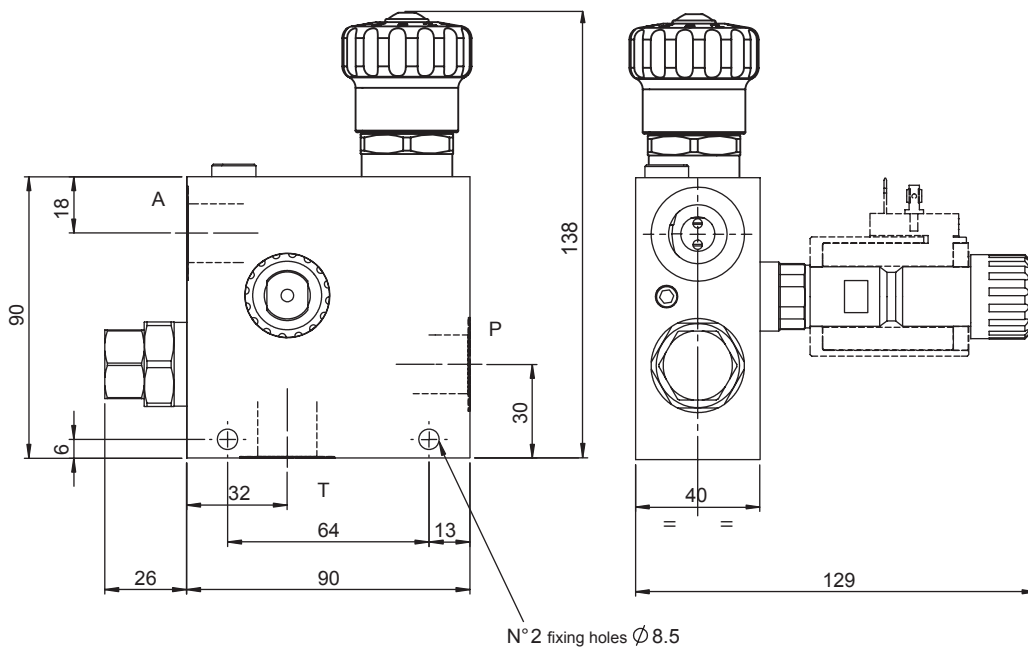
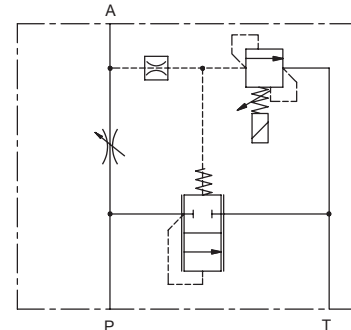
| RELIEF VALVE                   | M2       | M3       |
|--------------------------------|----------|----------|
| Setting range [bar]            | 40 - 220 | 50 - 350 |
| Pressure increase [bar/turn]   | 34       | 63       |
| Standard Setting 4 l/min [bar] | 100      | 200      |

| PORTS | 05     |
|-------|--------|
| A,P,T | G 3/4" |



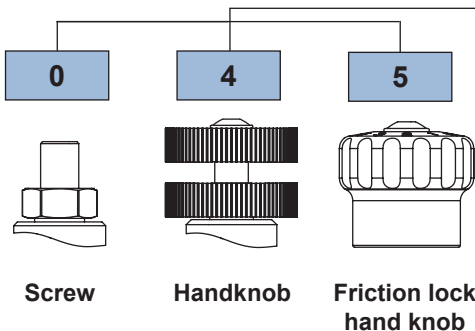
**3 WAYS FLOW CONTROL VALVE, MANUAL CONTROL & ELECTRO-PROPORTIONAL RELIEF VALVE**

- Max regulated flow ..... **50 l/min**
- Maximum flow ..... **90 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **1,8 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page 190)



**Ordering code**

**6 F 3 0 0 [ ] [ ] S [ ] 0 0 0**



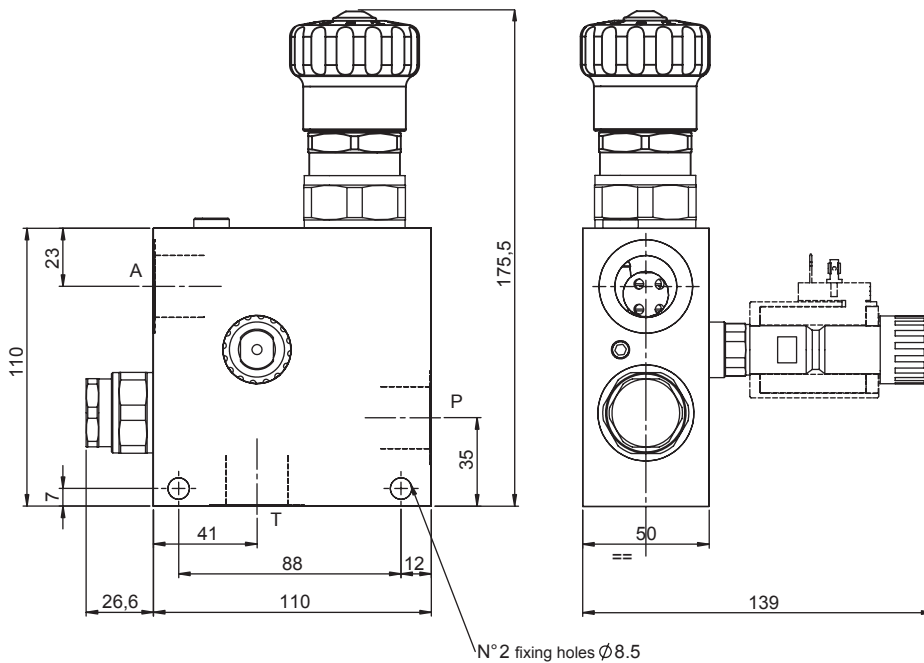
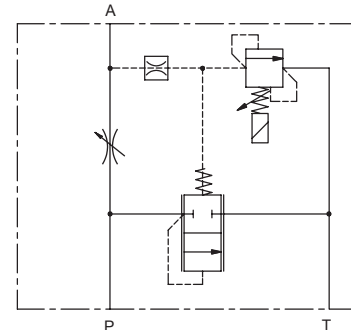
|                     |           |
|---------------------|-----------|
| <b>RELIEF VALVE</b> | <b>P2</b> |
| Setting range [bar] | 8 - 250   |

|              |           |           |
|--------------|-----------|-----------|
| <b>PORTS</b> | <b>03</b> | <b>04</b> |
| A,P,T        | G 3/8"    | G 1/2"    |



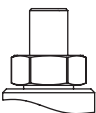
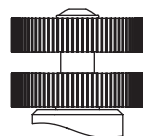
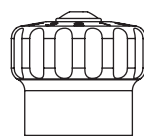
**3 WAYS FLOW CONTROL VALVE, MANUAL CONTROL & ELECTRO-PROPORTIONAL RELIEF VALVE**

- Max regulated flow ..... **90 l/min**
- Maximum flow ..... **150 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **1,8 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page 190)



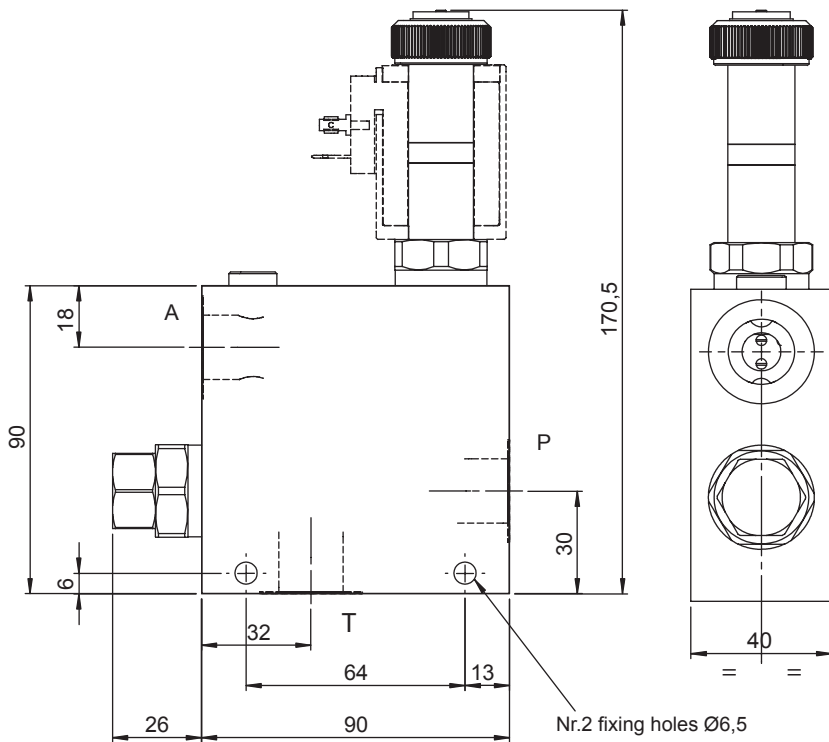
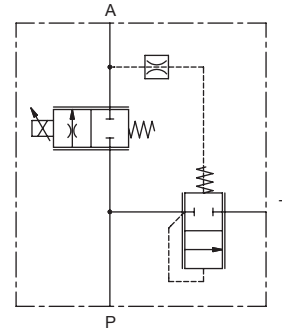
**Ordering code**

**6 F 3 0 0**     **S**   **0 0 0**

|   |   |   |                        |           |              |           |
|---|---|---|------------------------|-----------|--------------|-----------|
| <b>0</b>  | <b>4</b>  | <b>5</b>  | <b>RELIEF VALVE</b>    | <b>P2</b> | <b>PORTS</b> | <b>05</b> |
|  |  |  | Setting range<br>[bar] | 8 - 250   | A,P,T        | G 3/4"    |
| <b>Screw</b>  | <b>Handknob</b>   | <b>Friction lock<br/>hand knob</b>  |                        |           |              |           |

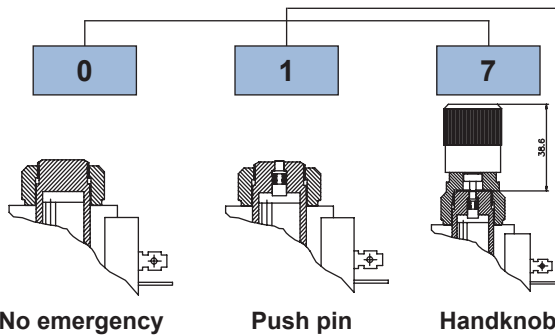
**3 WAYS FLOW CONTROL VALVE, ELECTRO-PROPORTIONAL CONTROL**

- Max regulated flow ..... **50 l/min**
- Maximum flow ..... **90 l/min**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **1,8 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page 190)



**Ordering code**

**6 F 3 0 1**    **0 0 S**    **0 0 0**

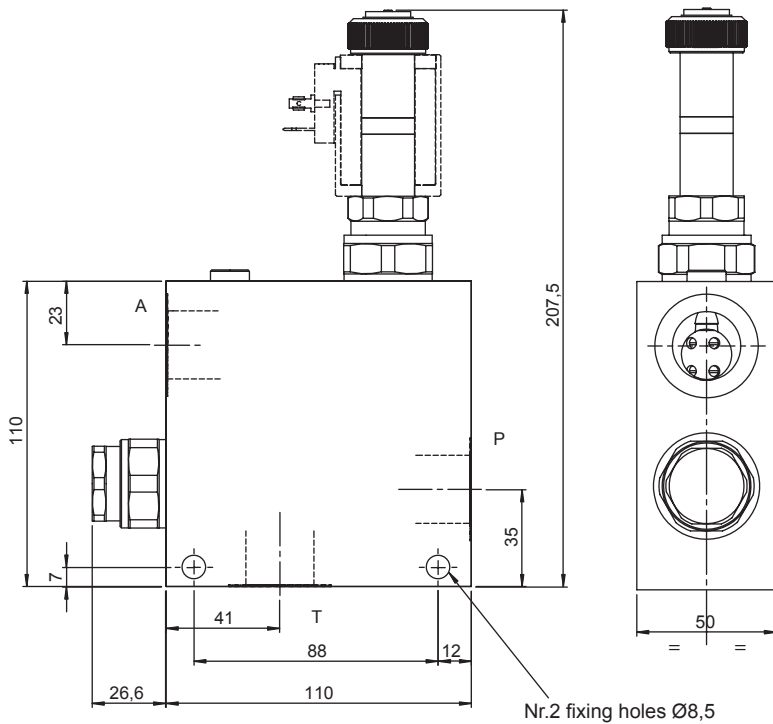
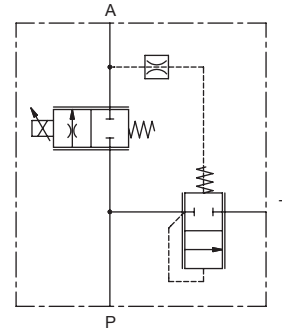


| PORTS | 03     | 04     |
|-------|--------|--------|
| A,P,T | G 3/8" | G 1/2" |



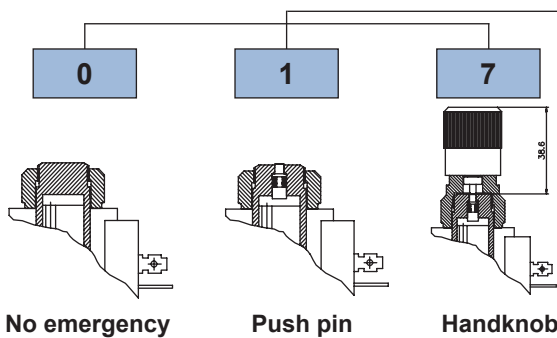
**3 WAYS FLOW CONTROL VALVE, ELECTRO-PROPORTIONAL CONTROL**

- Max regulated flow ..... **75 l/min**
- Maximum flow ..... **150 l/min**
- Max pressure P:A ..... **.350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **.900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **2,2 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page190)



**Ordering code**

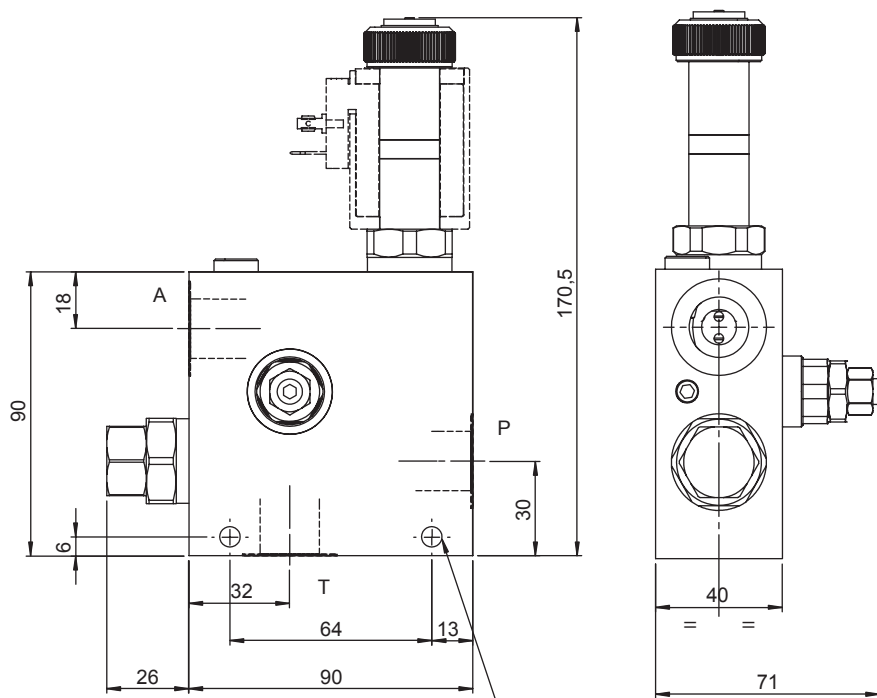
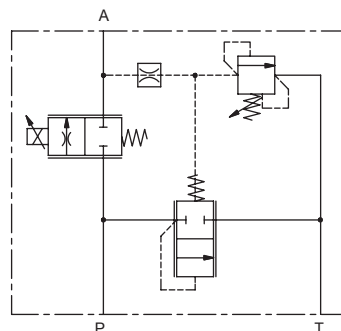
**6 F 3 0 1 [ ] 0 0 S [ ] 0 0 0**



|              |           |
|--------------|-----------|
| <b>PORTS</b> | <b>05</b> |
| A,P,T        | G 3/4"    |

**3 WAYS FLOW CONTROL VALVE, ELECTRO-PROPORTIONAL CONTROL & PRESSURE RELIEF VALVE**

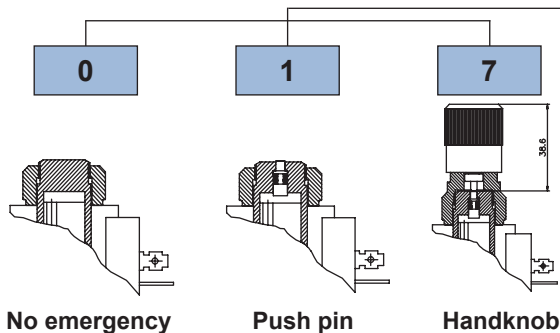
- Max regulated flow ..... **50 l/min**
- Maximum flow ..... **90 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **1,8 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page190)



Nr.2 fixing holes Ø6,5

**Ordering code**

**6 F 3 0 1**     **S**   **0 0 0**



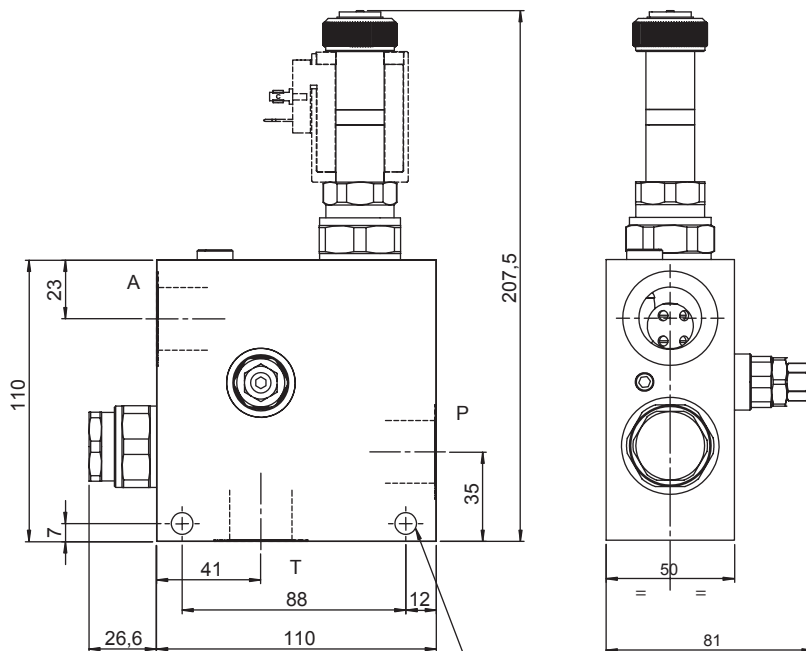
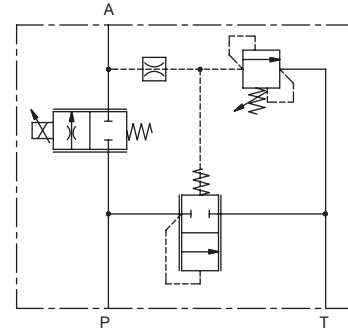
| RELIEF VALVE                   | M2       | M3       |
|--------------------------------|----------|----------|
| Setting range [bar]            | 40 - 220 | 50 - 350 |
| Pressure increase [bar/turn]   | 34       | 63       |
| Standard Setting 4 l/min [bar] | 100      | 200      |

| PORTS | 03     | 04     |
|-------|--------|--------|
| A,P,T | G 3/8" | G 1/2" |



**3 WAYS FLOW CONTROL VALVE, ELECTRO-PROPORTIONAL CONTROL & PRESSURE RELIEF VALVE**

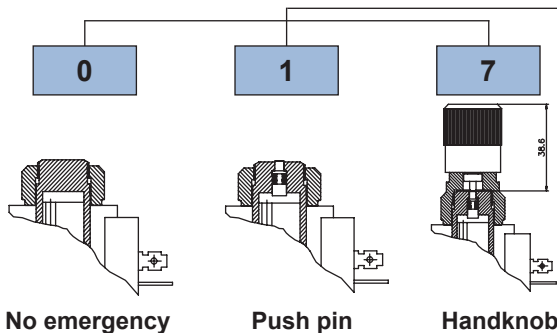
- Max regulated flow ..... **75 l/min**
- Maximum flow ..... **150 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **1,8 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page 190)



Nr.2 fixing holes Ø8,5

**Ordering code**

**6 F 3 0 1**     **S**   **0 0 0**

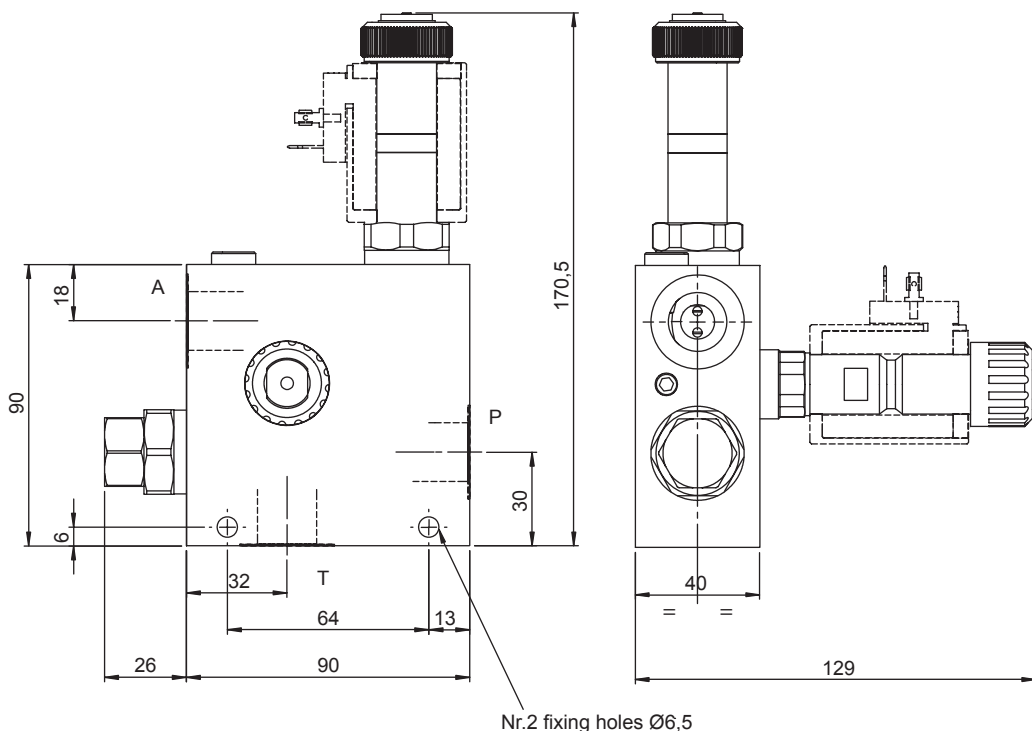
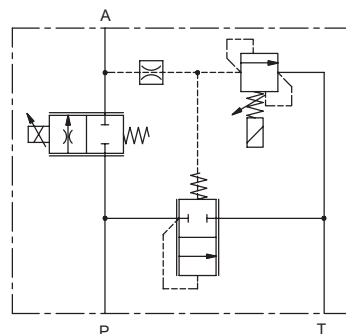


| RELIEF VALVE                   | M2       | M3       |
|--------------------------------|----------|----------|
| Setting range [bar]            | 40 - 220 | 50 - 350 |
| Pressure increase [bar/turn]   | 34       | 63       |
| Standard Setting 4 l/min [bar] | 100      | 200      |

| PORTS | 05     |
|-------|--------|
| A,P,T | G 3/4" |

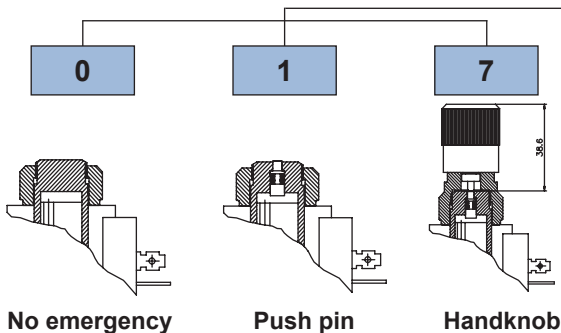
**ELECTRO-PROPORTIONAL 3 WAYS FLOW CONTROL & RELIEF VALVE**

- Max regulated flow ..... **50 l/min**
- Maximum flow ..... **90 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **1,8 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page 190)



**Ordering code**

**6 F 3 0 1**     **S**   **0 0 0**



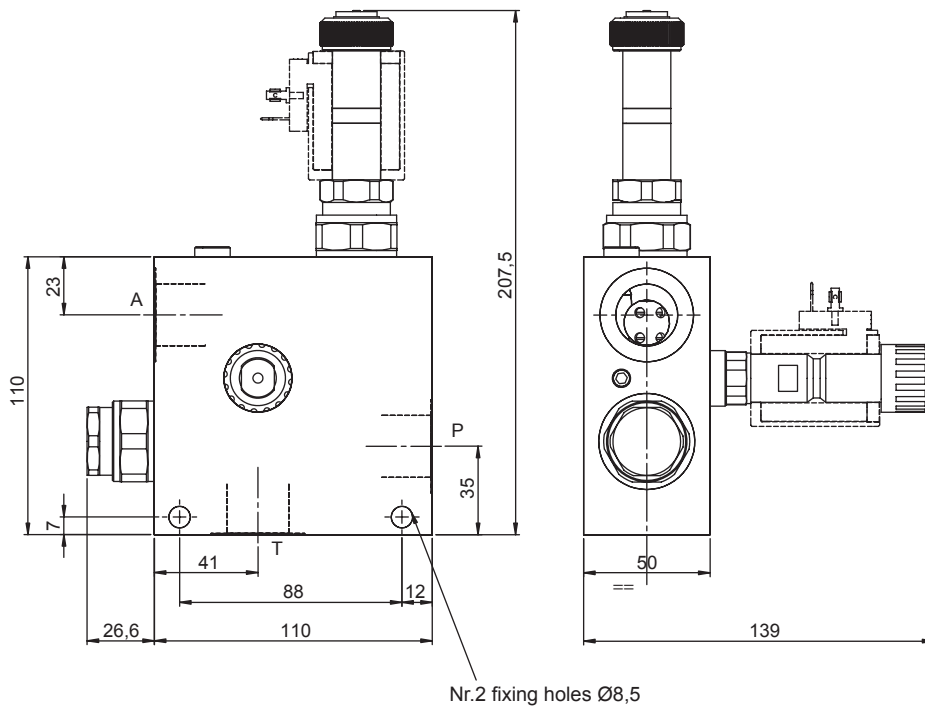
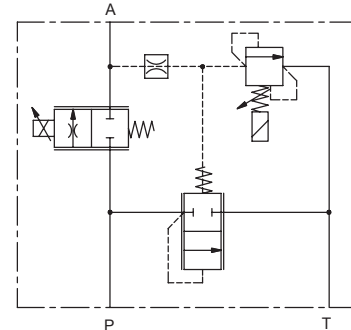
|                     |           |
|---------------------|-----------|
| <b>RELIEF VALVE</b> | <b>P2</b> |
| Setting range [bar] | 8 - 250   |

|              |           |           |
|--------------|-----------|-----------|
| <b>PORTS</b> | <b>03</b> | <b>04</b> |
| A,P,T        | G 3/8"    | G 1/2"    |



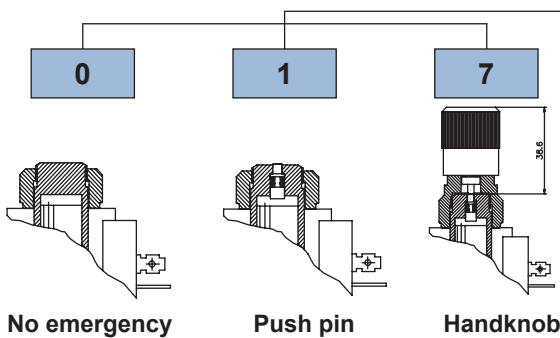
**ELECTRO-PROPORTIONAL 3 WAYS FLOW CONTROL & RELIEF VALVE**

- Max regulated flow ..... **75 l/min**
- Maximum flow ..... **150 l/min**
- Max pressure T ..... **10 bar**
- Max pressure P:A ..... **350 bar**
- Seals ..... **NBR**
- Max current at 12 Vcc ..... **1800mA**
- Max current at 24 Vcc ..... **900mA**
- PWM ..... **120 Hz**
- Hysteresis ..... **5%**
- Weight (with coil) ..... **1,8 Kg**
- Ring nut tightening torque for coil: ..... **5 Nm**
- Coil **09800** to be ordered separately (page 190)



**Ordering code**

**6 F 3 0 1**       **S**    **0 0 0**



|                     |           |
|---------------------|-----------|
| <b>RELIEF VALVE</b> | <b>P2</b> |
| Setting range [bar] | 8 - 250   |

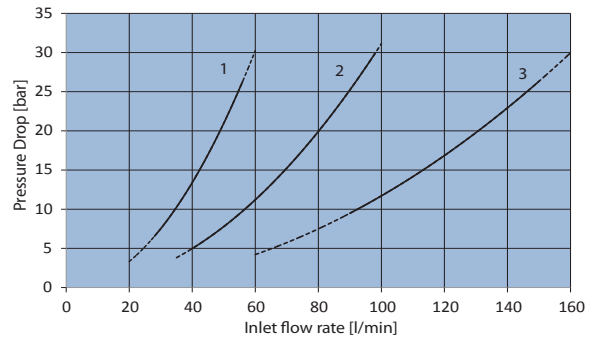
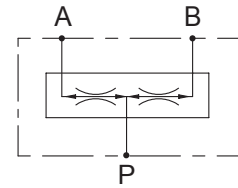
|              |           |
|--------------|-----------|
| <b>PORTS</b> | <b>05</b> |
| A,P,T        | G 3/4"    |



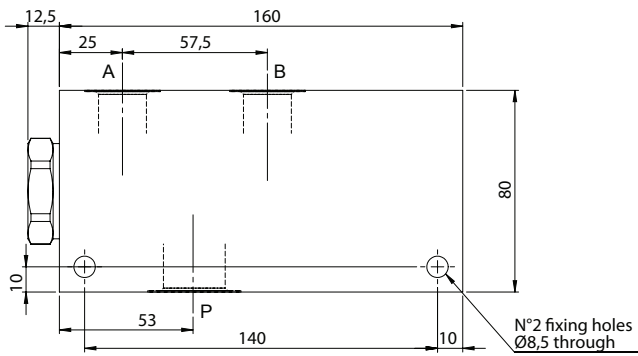


**FLOW DIVIDER AND COMBINER VALVE**

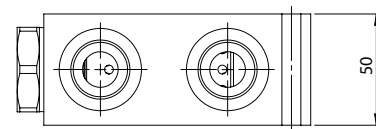
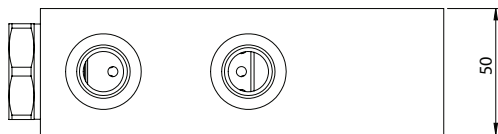
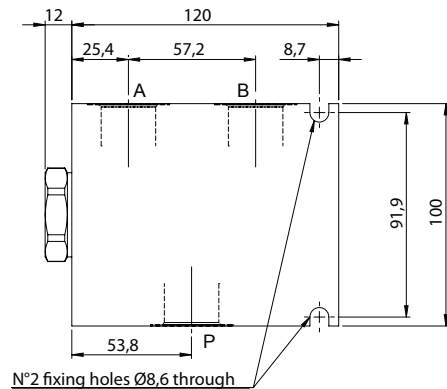
- Flow.....150 l/min
- Max working pressure.....250 bar
- Division ratio.....50% ÷ 50%
- Tolerance.....< +/-3%
- Weight (layout 0).....1,90 Kg
- Weight (layout 1).....1,75 Kg



**LAYOUT 0**



**LAYOUT 1**



**Ordering code**

**6 D 8 2 5** 0 **A**     **N 0 0**

| SETTING RANGE        | 1       | 2       | 3        |
|----------------------|---------|---------|----------|
| Qmin ÷ Qmax<br>l/min | 28 ÷ 55 | 56 ÷ 95 | 90 ÷ 150 |

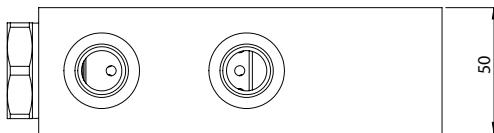
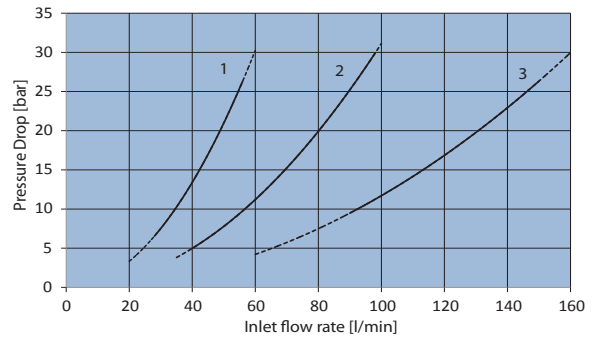
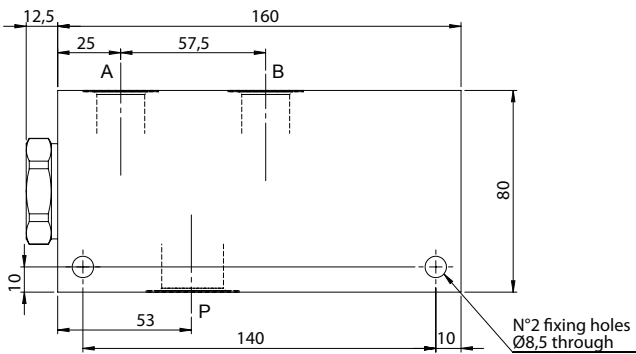
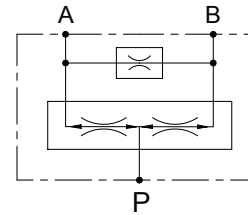
| LAYOUT | 0 | 1 |
|--------|---|---|
|--------|---|---|

| PORTS | 54     | 55     | 65     | 66   |
|-------|--------|--------|--------|------|
| P     | G 3/4" | G 3/4" | G 1"   | G 1" |
| A,B   | G 1/2" | G 3/4" | G 3/4" | G 1" |



**FLOW DIVIDER AND COMBINER VALVE WITH EQUALIZING ORIFICE**

- Flow ..... **150 l/min**
- Max working pressure ..... **250 bar**
- Division ratio ..... **50% ÷ 50%**
- Tolerance ..... **< +/-3%**
- Weight ..... **1,90 Kg**



**Ordering code**

**6 D 8 2 5**    **0 A 0**    **G**   

| SETTING RANGE        | 1       | 2       | 3        |
|----------------------|---------|---------|----------|
| Qmin ÷ Qmax<br>l/min | 28 ÷ 55 | 56 ÷ 95 | 90 ÷ 150 |

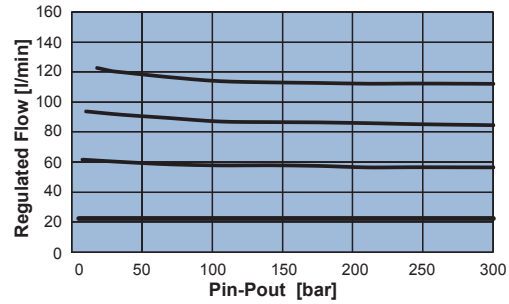
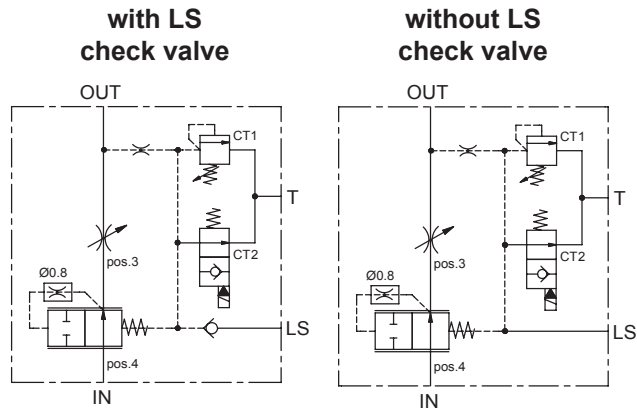
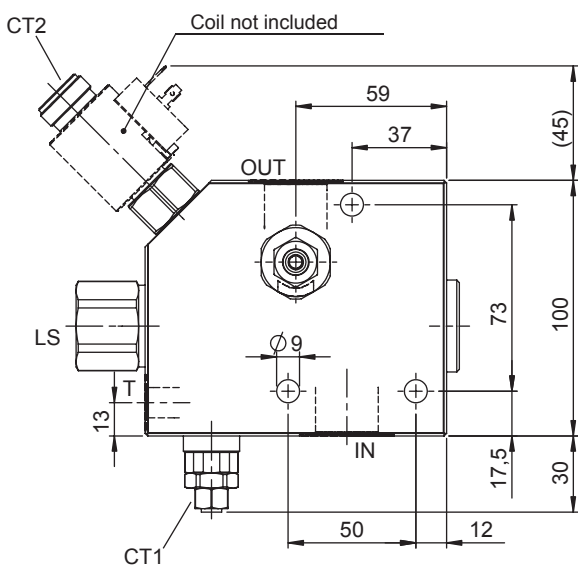
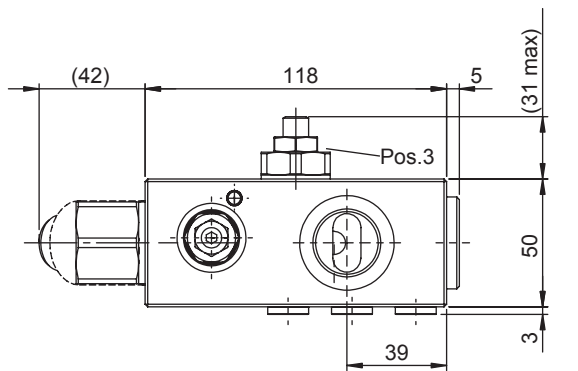
| PORTS | 54     | 55     | 65     | 66   |
|-------|--------|--------|--------|------|
| P     | G 3/4" | G 3/4" | G 1"   | G 1" |
| A,B   | G 1/2" | G 3/4" | G 3/4" | G 1" |

| EQUALIZING ORIFICE |                    |
|--------------------|--------------------|
| <b>00</b>          | Plug               |
| <b>**</b>          | Orifice diameter** |

\*\* Ordering code examples  
6D82520A055G06 orifice Ø 0,6 mm  
6D82520A055G15 orifice Ø 1,5 mm  
(maximum Ø 2,8 mm)

**2 WAYS PRESSURE COMPENSATED FLOW CONTROL VALVE FOR LS CIRCUITS**

- Max pressure. .... **350 bar**
- Max regulated flow ..... **140 l/min**
- Standard regulated flow. .... **30 l/min**
- Regulated flow variation by turn ..... **15,5 l/min**
- Weight ..... **4,6 Kg**
- Coil **09400** to be ordered separately (page189)



- Note:**
- Flow (OUT) can be regulated at the required value, acting on adjustable screw (pos. 3); flow increases when the screw is turned clockwise.
  - Max leakage in T: 3l/min.
  - Max backpressure in T: 1,5 bar.
  - For optimal functionality of the compensator, when the electric valve (CT2) is open, it's important to make sure that regulated line OUT is pressurized at 7,5 bar at least. If not, a unidirectional valve must be installed, to supply the required backpressure (see pag. 182-183).
  - Check valve on port LS requires dumping of Load Sensing line, through a compensated draining, when electric valve is open (CT2).
  - For applications which need Post-Compensated directional control valves, refer to schemes 2 and 3, in which there is an LS check valve.
  - For applications which need Pre-Compensated directional control valves and direct connections to variable piston pumps, refer to schemes 4 and 5.

**Ordering code**

**6 F 2 S**          **0 0**

| ELECTRIC-VALVE SCHEME |                    |
|-----------------------|--------------------|
| <b>0</b>              | Normally open - NO |

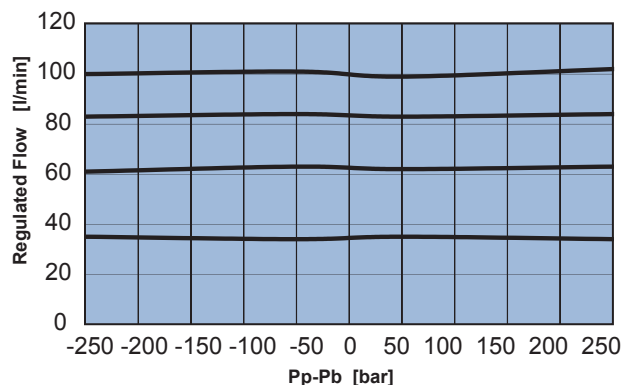
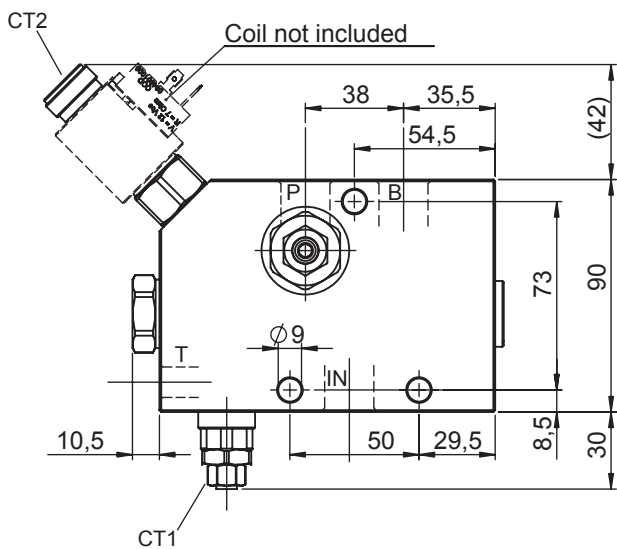
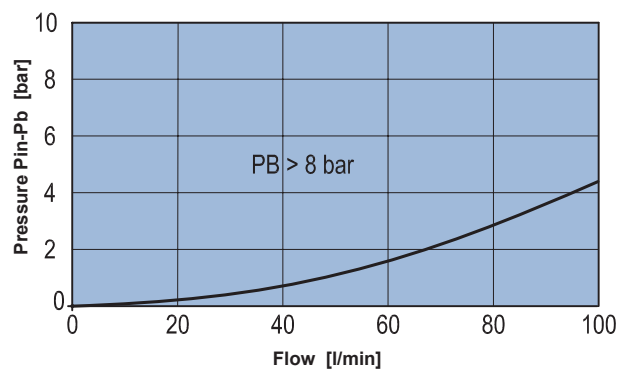
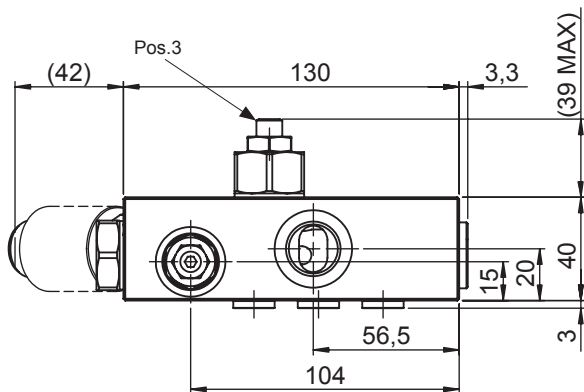
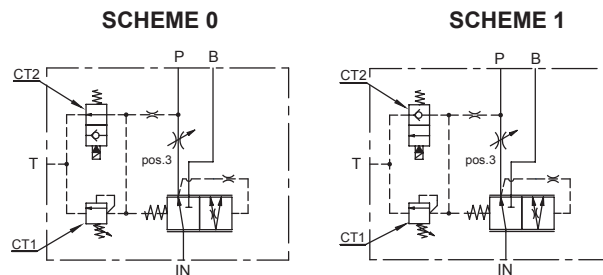
| SPRING                       | 2           | 3           | 4              | 5              |
|------------------------------|-------------|-------------|----------------|----------------|
| Setting range [bar]          | 40 - 220    | 50 - 350    | 40 - 220       | 50 - 350       |
| Pressure Increase [bar/turn] | 34          | 63          | 34             | 63             |
| Standard Setting [bar]       | 210         | 350         | 210            | 350            |
| <b>Check Valve LS</b>        | <b>with</b> | <b>with</b> | <b>without</b> | <b>without</b> |

| PORTS  | 05     | 55     |
|--------|--------|--------|
| IN,OUT | G 3/4" | SAE 12 |
| T,LS   | G 1/4" | SAE 06 |



**PRIORITY FLOW REGULATOR WITH ELECTRIC ACTIVATION AND PRESSURE RELIEF VALVE**

- Nominal Flow (IN) ..... **100 l/min**
- Max pressure. .... **350 bar**
- Max regulated flow (P)..... **85 l/min**
- Standard regulated flow ..... **30 l/min**
- Regulated flow variation by turn ..... **10 l/min**
- Weight ..... **11.9 Kg**
- Coil **09400** to be ordered separately (page 189)



**Note:**  
 - Flow (P) can be regulated at the required value, acting on adjustable screw (pos. 3); flow gets increased when the screw is turned clockwise.  
 - Max leakage in T: 3l/min.  
 - Max backpressure in T: 1,5 bar  
 - For optimal functionality of the compensator, when the electric valve (CT2) is open, it's important to make sure that regulated P line is pressurized at least 7,5 bar. If not, a unidirectional valve must be installed, to supply the required backpressure (see page 183).

**Ordering code**

**6 F 3 S** [ ] [ ] [ ] **0 0**

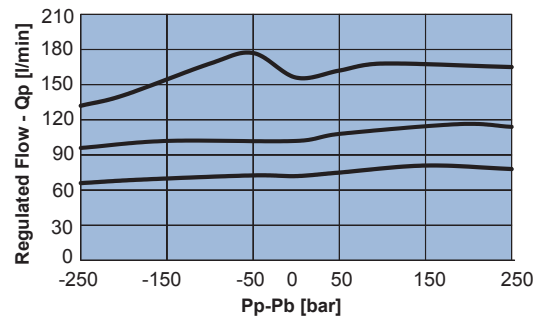
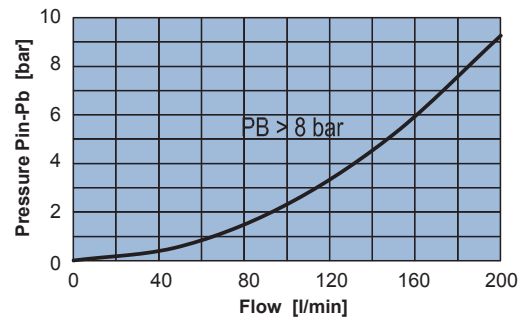
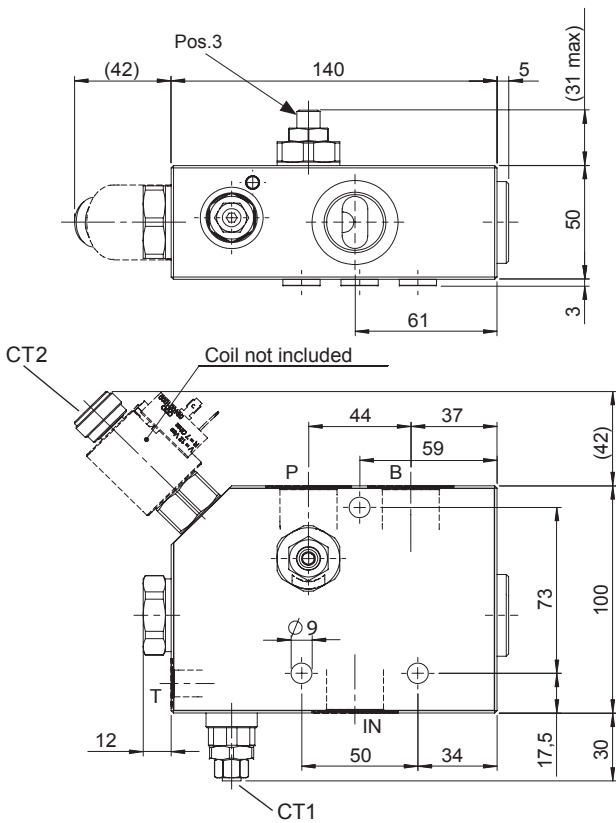
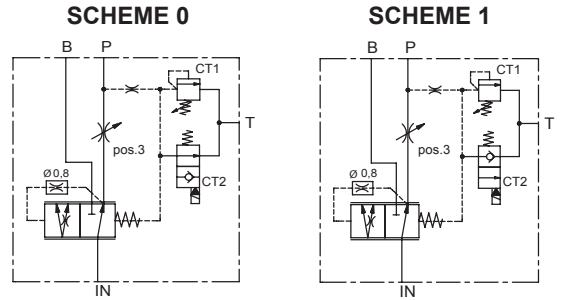
| HYDRAULIC SCHEME |                          |
|------------------|--------------------------|
| <b>0</b>         | CT2 Normally open - NO   |
| <b>1</b>         | CT2 Normally closed - NC |
| <b>3</b>         | Without CT2              |

| SPRING CT1                   | 0           | 3         |
|------------------------------|-------------|-----------|
| Setting Range [bar]          | Without CT1 | 100 - 350 |
| Pressure Increase [bar/turn] |             | 63        |
| Standard Setting [bar]       |             | 210       |

| PORTS  | 04     | 52     |
|--------|--------|--------|
| IN,P,B | G 1/2" | SAE 10 |
| T      | G 1/4" | SAE 06 |

**PRIORITY FLOW REGULATOR WITH ELECTRIC ACTIVATION AND PRESSURE RELIEF VALVE**

- Nominal Flow (IN)..... **200 l/min**
- Max pressure..... **350 bar**
- Max regulated flow (P)..... **140 l/min**
- Standard regulated flow..... **30 l/min**
- Regulated flow variation by turn..... **19 l/min**
- Weight..... **5 Kg**
- Coil **09400** to be ordered separately (page 189)



**Note:**

- Flow (P) can be regulated at the required value, acting on adjustable screw (pos. 3); flow gets increased when the screw is turned clockwise.
- Max leakage in T: 3l/min.
- Max backpressure in T: 1,5 bar
- For optimal functionality of the compensator, when the electric valve (CT2) is open, it's important to make sure that regulated P line is pressurized at least 7,5 bar. If not, a unidirectional valve must be installed, to supply the required backpressure (see page 183).

**Ordering code**

**6 F 3 S**          **0 0**

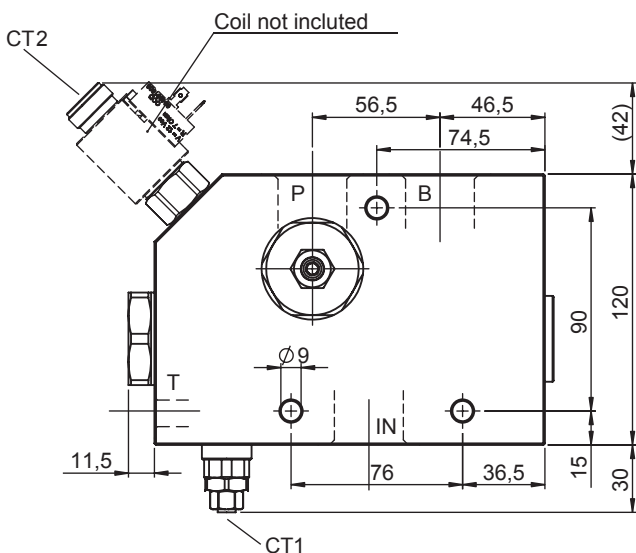
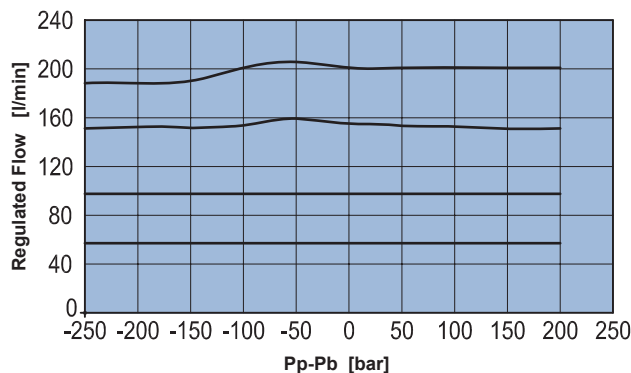
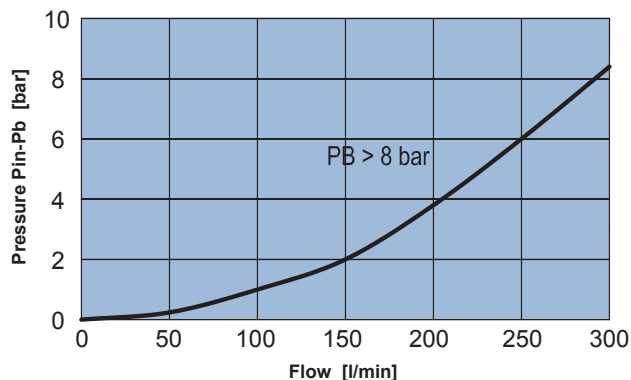
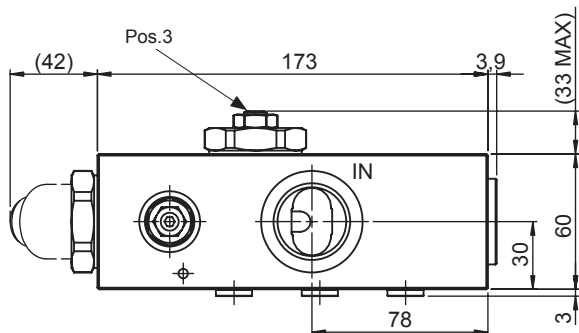
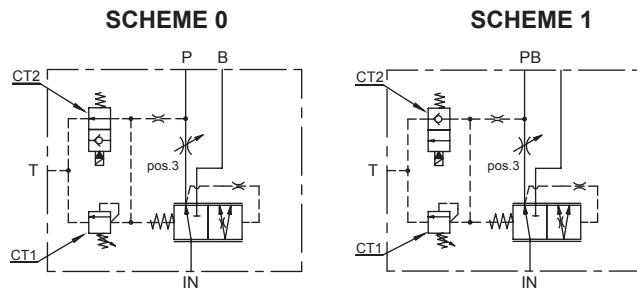
| HYDRAULIC SCHEME |                          |
|------------------|--------------------------|
| <b>0</b>         | CT2 Normally open - NO   |
| <b>1</b>         | CT2 Normally closed - NC |
| <b>3</b>         | Without CT2              |

| SPRING CT1                   | 0           | 2        | 3        |
|------------------------------|-------------|----------|----------|
| Setting Range [bar]          | Without CT1 | 40 - 220 | 50 - 350 |
| Pressure Increase [bar/turn] |             | 34       | 63       |
| Standard Setting [bar]       |             | 210      | 350      |

| PORTS  | 05     |
|--------|--------|
| IN,P,B | G 3/4" |
| T      | G 1/4" |

**PRIORITY FLOW REGULATOR WITH ELECTRIC ACTIVATION AND PRESSURE RELIEF VALVE**

- Nominal Flow (IN) ..... **300 l/min**
- Max pressure. .... **350 bar**
- Max regulated flow (P)..... **220 l/min**
- Standard regulated flow ..... **30 l/min**
- Regulated flow variation by turn (Pos.3)..... **27 l/min**
- Weight ..... **8.8 Kg**
- Coil **09400** to be ordered separately (page 189)



**Note:**  
 - Flow (P) can be regulated at the required value, acting on adjustable screw (pos. 3); flow gets increased when the screw is turned clockwise.  
 - Max leakage in T: 3l/min.  
 - Max backpressure in T: 1,5 bar  
 - For optimal functionality of the compensator, when the electric valve (CT2) is open, it's important to make sure that regulated P line is pressurized at least 7,5 bar. If not, a unidirectional valve must be installed, to supply the required backpressure (see page 183).

**Ordering code**

**6 F 3 S** [ ] [ ] [ ] **0 0**

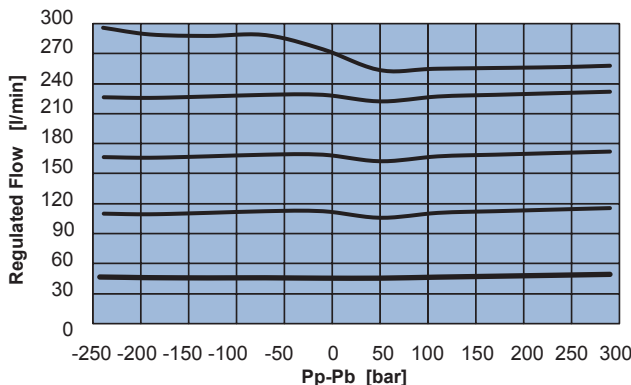
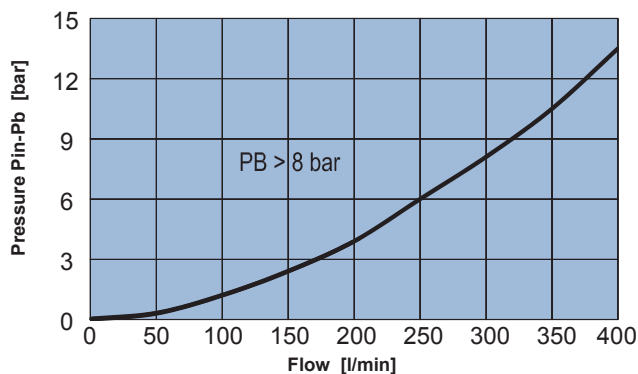
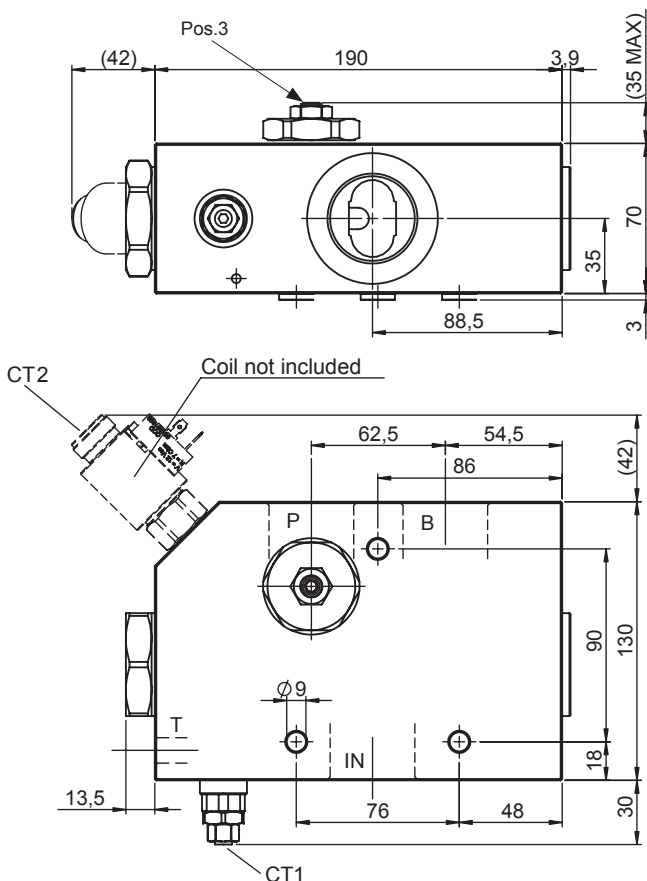
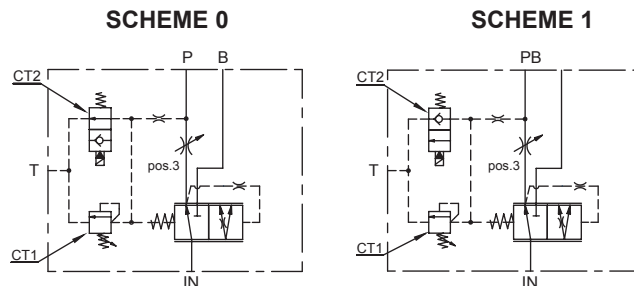
| HYDRAULIC SCHEME |                          |
|------------------|--------------------------|
| <b>0</b>         | CT2 Normally open - NO   |
| <b>1</b>         | CT2 Normally closed - NC |
| <b>3</b>         | Without CT2              |

| SPRING CT1                   | 0           | 3         |
|------------------------------|-------------|-----------|
| Setting Range [bar]          | Without CT1 | 100 - 350 |
| Pressure Increase [bar/turn] |             | 63        |
| Standard Setting [bar]       |             | 210       |

| PORTS  | 06     |
|--------|--------|
| IN,P,B | G 1"   |
| T      | G 1/4" |

**PRIORITY FLOW REGULATOR WITH ELECTRIC ACTIVATION AND PRESSURE RELIEF VALVE**

- Nominal Flow (IN) ..... **400 l/min**
- Max pressure. .... **350 bar**
- Max regulated flow (P). .... **300 l/min**
- Standard regulated flow ..... **30 l/min**
- Regulated flow variation by turn (Pos.3). .... **20 l/min**
- Weight ..... **11.9 Kg**
- Coil **09400** to be ordered separately (page 189)



**Note:**  
 - Flow (P) can be regulated at the required value, acting on adjustable screw (pos. 3); flow gets increased when the screw is turned clockwise.  
 - Max leakage in T: 3l/min.  
 - Max backpressure in T: 1,5 bar  
 - For optimal functionality of the compensator, when the electric valve (CT2) is open, it's important to make sure that regulated P line is pressurized at least 8-9 bar. If not, a unidirectional valve must be installed, to supply the required backpressure (see page 183).

**Ordering code**

**6 F 3 S** [ ] [ ] [ ] **00**

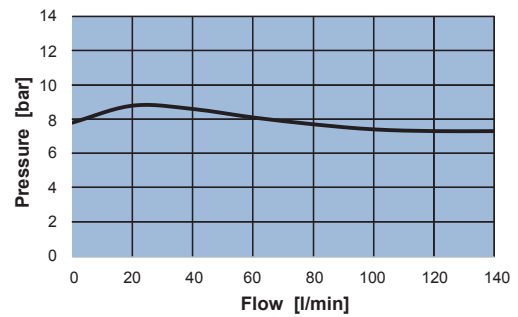
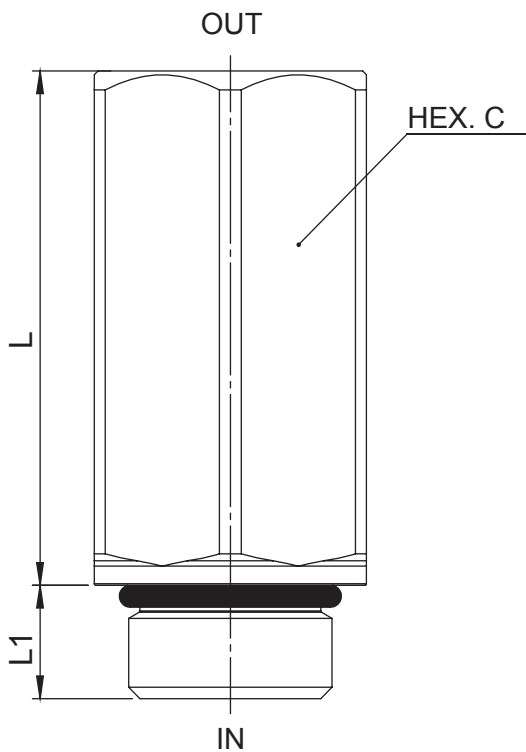
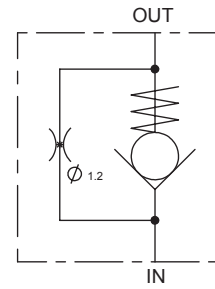
| HYDRAULIC SCHEME |                          |
|------------------|--------------------------|
| <b>0</b>         | CT2 Normally open - NO   |
| <b>1</b>         | CT2 Normally closed - NC |
| <b>3</b>         | Without CT2              |

| SPRING CT1                   | 0           | 3         |
|------------------------------|-------------|-----------|
| Setting Range [bar]          | Without CT1 | 100 - 350 |
| Pressure Increase [bar/turn] |             | 63        |
| Standard Setting [bar]       |             | 210       |

| PORTS  | 07        |
|--------|-----------|
| IN,P,B | G 1"-1/4" |
| T      | G 1/4"    |

**CHECK VALVE M/F WITH BY-PASS ORIFICE**

- Max pressure..... **350 bar**
- Max flow. . . . . **130 l/min**
- Seals..... **NBR**
- Cartridge tightening torque:..... **150 Nm**
- Weight..... **0,45 Kg**



**Ordering code**

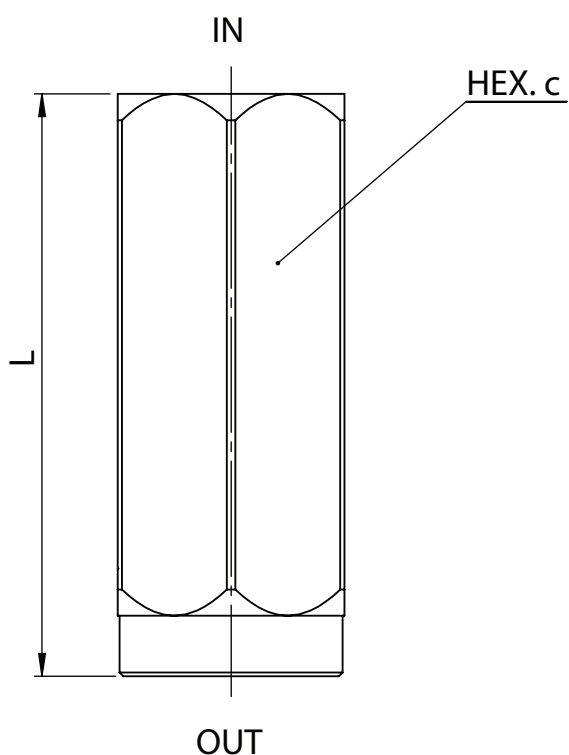
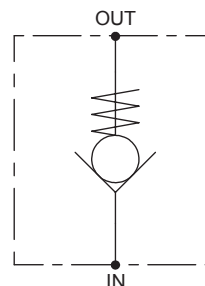
**6 D 7 1 0**     **1 2 0 0**

| PORTS     |               |    |    | SPRING |                  |
|-----------|---------------|----|----|--------|------------------|
| C         | L1            | L  |    |        |                  |
| <b>55</b> | <b>SAE 12</b> | 36 | 15 | 68     | <b>C</b> 7.8 bar |



**CHECK VALVE F/F**

| Ports IN-OUT | Max flow | Max pressure | c  | L   | Weight |
|--------------|----------|--------------|----|-----|--------|
| BSP          | l/min    | bar          | mm | mm  | Kg     |
| G 1/2"       | 70       | 350          | 30 | 77  | 0,322  |
| G 3/4"       | 110      | 350          | 36 | 88  | 0,492  |
| G 1"         | 160      | 350          | 41 | 105 | 0,676  |
| G 1-1/4"     | 250      | 300          | 55 | 135 | 1,646  |



**Ordering code**

6 D 7 2 0       0 0 0 0

| PORTS |          |
|-------|----------|
| 04    | G 1/2"   |
| 05    | G 3/4"   |
| 06    | G 1"     |
| 07    | G 1-1/4" |

| SPRING |       |
|--------|-------|
| C      | 8 bar |