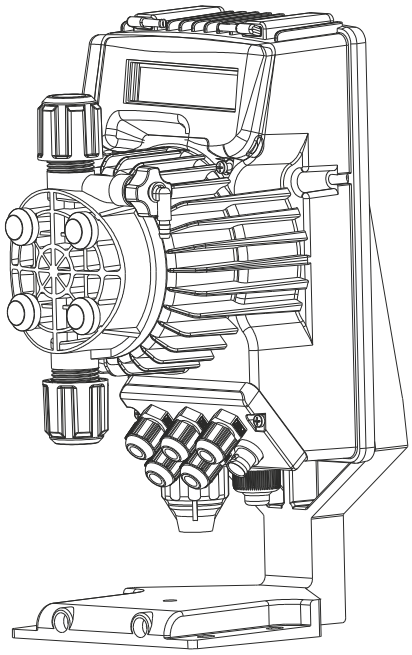
# DOSING PUMP

## TEKNA MODBUS Series – Solenoid Dosing Pump

### TECHNICAL CHARACTERISTICS



- Flow rates:  from 4 to 18 l/h
- Max back pressure: up to 20 bar
- Power supply: 100÷240 Vac - 50/60 Hz
- Stroke rate: from 160 to 300 strokes/minute
- Pump head: PVDF
- Diaphragm: PTFE
- External Enclosure: PP reinforced with fiber glass protection degree IP65
- Ingress protection: IP65
- Manually priming valve
- Installation kit: Included

The SEKO Tekna TPG and TPR Modbus Series adds to the functionality of the original models the capacity to dialogue with a PLC using the Modbus protocol.

The devices connected to a Modbus RTU bus communicate using a half-duplex RS485 link with the following standard parameters:

- ModBus RTU communication protocol;
- Settable communication parameters;
- Default communication parameters:
    - Baud rate: 19200;
    - Data bit: 8;
    - Stop Bit: 1;
    - Parity: Even.

A single frame of data is called PDU; in RS485 configuration its maximum size is 253 bytes (256 – server address - CRC). Every connected device must manage its own RS485 transceiver, enabling and disabling it in order to achieve the correct data exchange over the wire without errors and conflicts.
The ambient temperature at the site of pump installation cannot exceed 40°C, and the relative humidity cannot be above 90%; the pump cannot be installed in a place exposed to sun or bad weather.

# DOSING PUMP

## TEKNA MODBUS Series – Solenoid Dosing Pump

## KEY CODE

**model**

| | |
|---|---|
| TPG | Constant flow rate manually adjustable. Proportional flow rate according to an external analogic (4-20 mA) or digital signal (water meter, 1:n or n:1). Timer function, ppm proportional dosing. Statistic. Password Input ON-OFF (remote control). Available with communication via ModBus protocol. |
| TPR | Constant flow rate manually adjustable. Proportional dosing according the measured pH or Redox value. PT100 probe input for thermal compensation. Repetition alarm relay. Input On-Off for remote control. 4÷20 mA output for measure transmission. Available with communication via ModBus protocol. |

| **hydraulics** | *Pressure* [bar] | *Flow rate* [l/h] | *Capacity* [cc/stroke] | *Frequency* [stroke/1'] | *Ø Connections* IN / EXT [mm] |
|---|---|---|---|---|---|
| 603 | 12 | 4 | 0,42 | 160 | 4 / 6 |
| | 10 | 5 | 0,52 | | |
| | 8 | 6 | 0,63 | | |
| | 2 | 8 | 0,83 | | |
| 800 | 16 | 7 | 0,38 | 300 | 4 / 6 |
| | 10 | 10 | 0,55 | | |
| | 5 | 15 | 0,83 | | |
| | 1 | 18 | 1,00 | | |

**power supply**

| | |
|---|---|
| N | 100÷240 Vac 50/60 Hz |

**liquid end**

| | |
|---|---|
| H | PVDF |
| A | PVDF - automatic degassing |
| I | SS316L |

**installation kit**

| | | |
|---|---|---|
| H | PVDF | |
| P | PVDF-T | |
| X | with 1,5 bar injection valve | |
| 0 | WITHOUT kit | *only for SS316L liquid end* |

**seals**

| | | |
|---|---|---|
| 0 | FKM-B | |
| 1 | EPDM | |
| 2 | PTFE | |
| 3 | FFKM | *NOT for 803 hydraulic - kit with PTFE seals* |

**optional**

| | |
|---|---|
| 0 | standard |

**optional / customization**

| | |
|---|---|
| 00 | standard |
| M0 | ModBus |

| TPG | 800 | N | H | H | 0 | 0 | M0 |
|---|---|---|---|---|---|---|---|

# DOSING PUMP

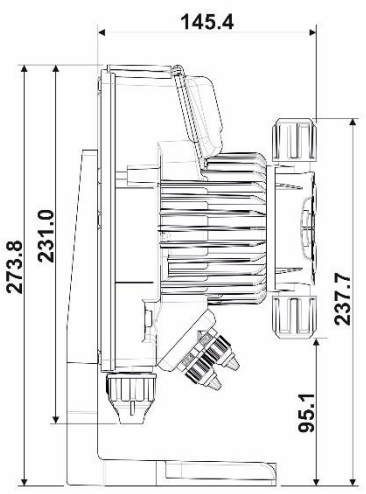
## TEKNA MODBUS Series – Solenoid Dosing Pump

## HYDRAULIC CHARACTERISTICS

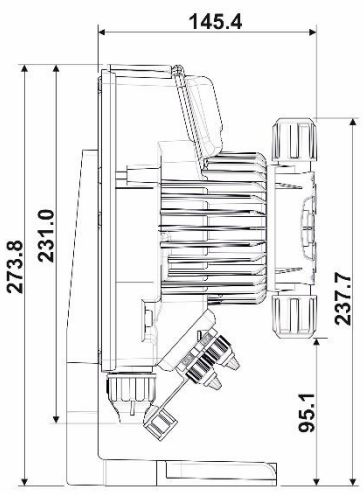
| Pump model | Pressure [bar] | Flow Rate [l/h] | Frequency max [stroke/min] | *Stroke capacity [cc/stroke]* | *Connection [mm]* | | Power supply | Consumption [W] | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Suction | Discharge | | Min | Max |
| **TPG/TPR 603N** | 12<br>10<br>8<br>2 | 4,0<br>5,0<br>6,0<br>8,0 | 160 | 0,42<br>0,52<br>0,63<br>0,83 | 4/6 | 4/6 | 100÷240 Vac | 15,0 | 22,0 |
| **TPG/TPR 800N** | 16<br>10<br>5<br>1 | 7,0<br>10,0<br>15,0<br>18,0 | 300 | 0,39<br>0,56<br>0,83<br>1,00 | 4/6 | 4/6 | 100÷240 Vac | 22,0 | 36,0 |

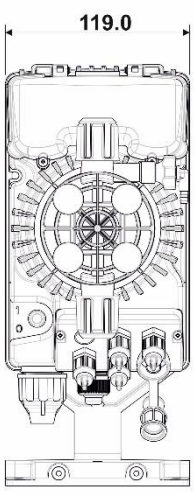
## DIMENSIONS

TPG




TPR




| INSTALLATION KIT | PVDF | PVDF-T |
|---|---|---|
| foot filter | ● | ● |
| injection valve | ● | ● |
| PVC suction tube (4 m) | ● | |
| PE delivery tube (2 m) | ● | |
| Wall and base fixing bracket | ● | |

## PERFORMANCE

