

# Quick Start Manual



# LevelPro® — TVF Series

## Flow Display | Controller | Batcher

### Symbol Explanation



This symbol denotes especially important guidelines concerning the installation and operation of the device. Not complying with the guidelines denoted by this symbol may cause an accident, damage or equipment destruction.

### Basic Requirements | User Safety



- Do not use the unit in areas threatened with excessive shocks, vibrations, dust, humidity, corrosive gasses and oils.
- Do not use the unit in areas where there is risk of explosions.
- Do not use the unit in areas with significant temperature variations, exposure to condensation or ice.
- The manufacturer is not responsible for any damages caused by inappropriate installation, not maintaining the proper environmental conditions and using the unit contrary to its assignment.
- If in the case of a unit malfunction there is a risk of a serious threat to the safety of people or property additional, independent systems and solutions to prevent such a threat must be used.
- The unit uses dangerous voltage that can cause a lethal accident. The unit must be switched off and disconnected from the power supply prior to starting installation of troubleshooting (in the case of malfunction).
- Do not attempt to disassemble, repair or modify the unit yourself. The unit has no user serviceable parts.
- Defective units must be disconnected and submitted for repairs at an authorized service center.

### Specifications

| General                  |                                                         |
|--------------------------|---------------------------------------------------------|
| Display                  | LED   6 Digit   13mm High   Red   Adjustable Brightness |
| Displayed Values         | 0 ~ 999999                                              |
| RS485 Transmission       | 1200...115200 bit/s, 8N1 / 8N2                          |
| Housing Material         | Polycarbonate                                           |
| Protection Class         | NEMA 4X   IP67                                          |
| Input Signal   Supply    |                                                         |
| Standard                 | Current: 4-20mA   0-20mA   0-5V*   0-10V*               |
| Voltage                  | 85 - 260V AC/DC   16 - 35V AC, 19 - 50V DC*             |
| Output Signal   Supply   |                                                         |
| Standard                 | 2 x Relays (5A)   1 x Relay (5A) + 4-20mA               |
| Communication            | RS485                                                   |
| Voltage                  | 24VDC                                                   |
| Passive current output * | 4-20mA   (Operating Range Max. 2.8 - 24mA)              |
| Performance              |                                                         |
| Accuracy                 | 0.1% @ 25°C One Digit                                   |
| Temperatures             |                                                         |
| Operating Temperature    | -40 - 158°F   -40 - 70°C                                |

\*Optional

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### Front Panel Description



### Function of Push Buttons



#### Symbol used in the manual : [ESC/MENU]

##### Functions:

- Enter to main menu (press and hold for at least 3 sec.)
- Exit the current Screen and Enter to previous menu (or measure mode)
- Cancel the changes made in parameter being edited



#### Symbol used in the manual : [ENTER/PAUSE]

##### Functions:

- Start to edit the parameter
- Enter into the sub-menu
- Confirmation of changes made in parameter being edited
- While batcher mode : Pause / Start Batching



#### Symbol used in the manual : [Σ/RESET]

##### Functions:

- Switching of the display between total and instantaneous measurements or batcher counter (while batcher mode only)
- Zeroing the currently displayed counter (Press & Hold for at least 2 Sec), the zeroing must be confirmed by [ENTER] button



#### Symbol used in the manual : [^] [v]

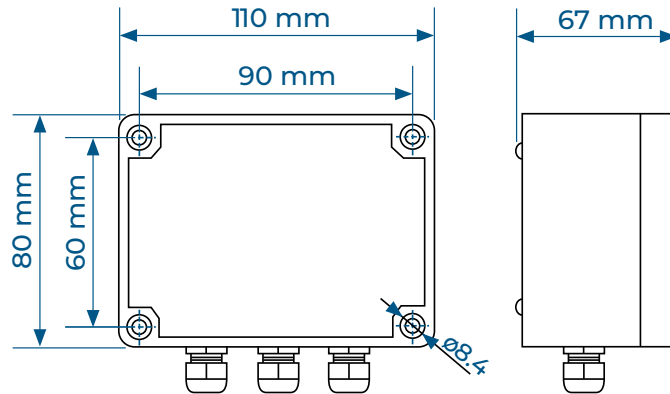
##### Functions:

- Change of the present menu
- Modification of the parameter value
- Switching of the display between relay thresholds and number of batches counter.

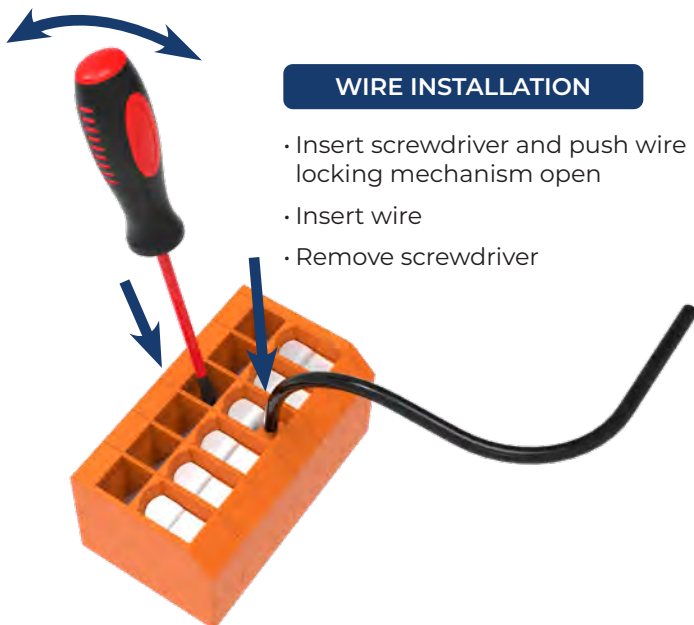
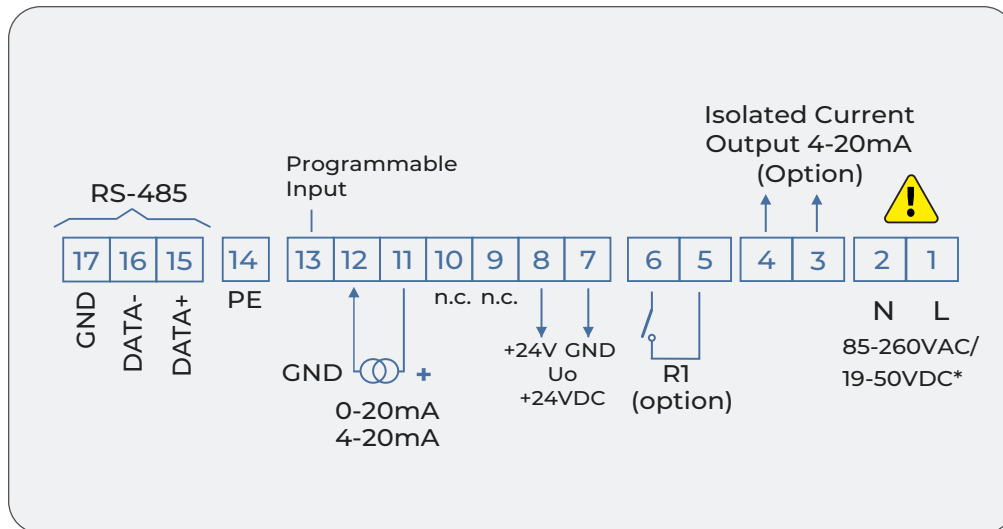
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### Dimensions



### Wiring Diagram



#### WIRE INSTALLATION

- Insert screwdriver and push wire locking mechanism open
- Insert wire
- Remove screwdriver

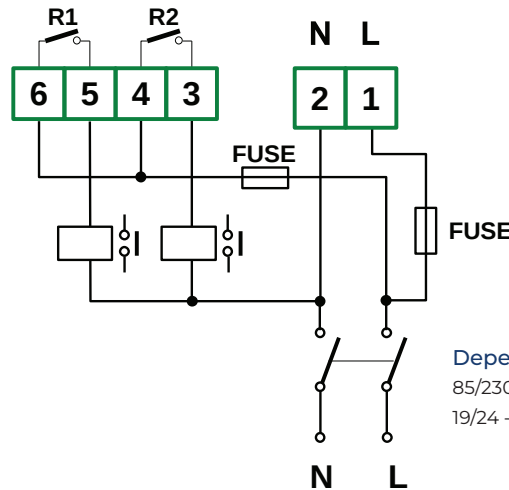


**Due to possible significant interference in industrial installations, appropriate measures assuring correct operation of the unit must be applied.**

The unit is not equipped with an internal fuse or power supply circuit breaker.

For this reason, an external time-delay cut-out fuse with a small nominal current value must be used (recommended bipolar, max. 2A) and a power supply circuit breaker located near the unit.

### Power Supply & Relay Connection



Depending on Version  
85/230/260V AC/DC ; 50 - 60 Hz  
19/24 - 50V DC ; 16/24/35V AC



Contacts of relay outputs are not equipped with spark suppressors. When using the relay outputs for switching of inductive loads (coils, contactors, power relays, electromagnets, motors etc.) it is required to use additional suppression circuit (typically capacitor 47nF/ min. 250VAC in series with 100R/5W resistor), connected in parallel to relay terminals or (better) directly on the load.

### Suppression Circuit Connection

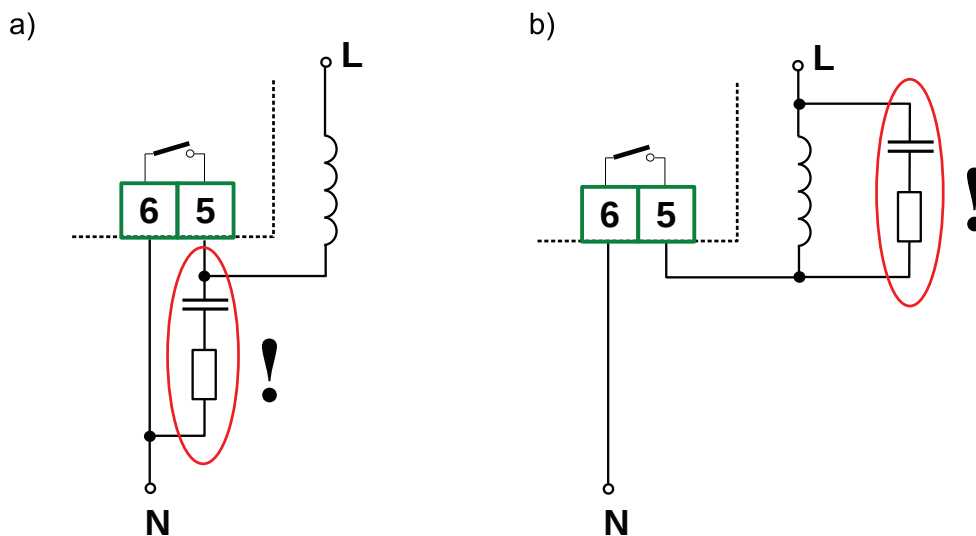


Figure: Examples of Suppression Circuit Connection  
a) To Stepper Relay Terminals b) To the Inductive Load (Motor)

OC-Type Output Connection

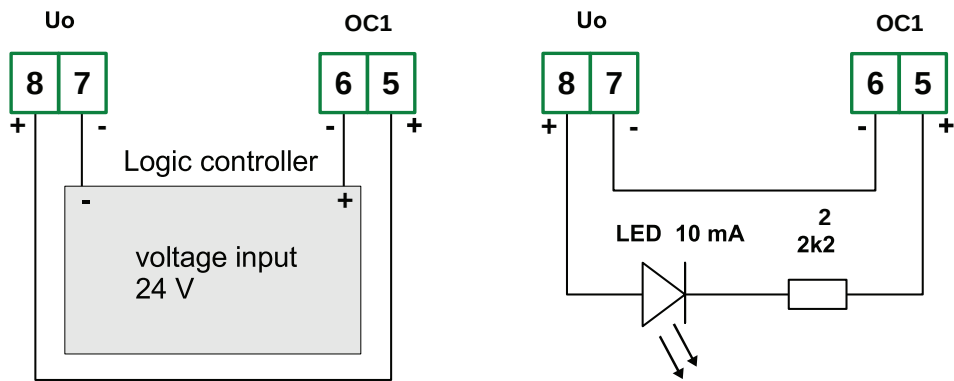


Figure: Examples of OC-type output connection

Current Output Connection Using Internal Power Supply

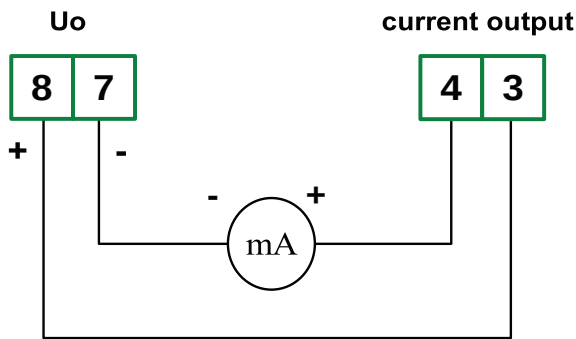


Figure: Example of current output connection using internal power supply

Current Output Connection Using External Power Supply

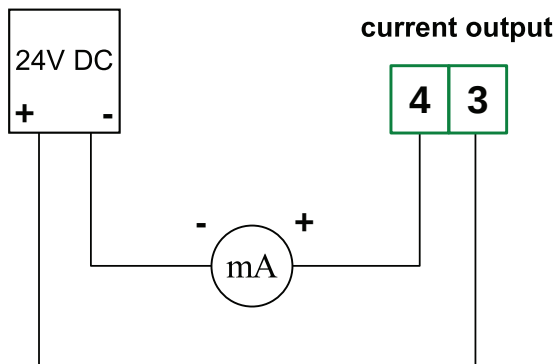


Figure: Example of current output connection using external power supply

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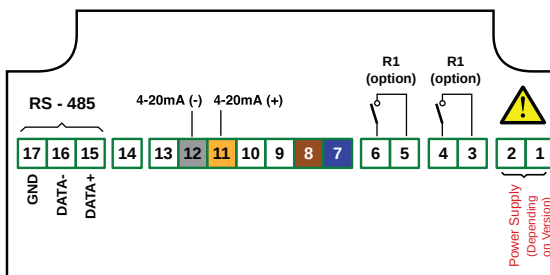


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### Flow Meter Connections (Relay Type)

#### TKM Series : 4-20mA Output

| TVF Terminal | Wire Color | Description |
|--------------|------------|-------------|
| 7            | Blue       | -VDC        |
| 8            | Brown      | +VDC        |
| 11           | Yellow     | mA+         |
| 12           | Grey       | mA-         |

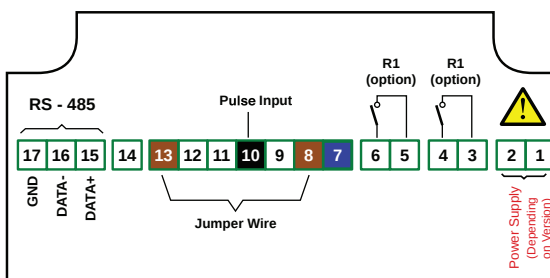


#### TKS Series : Pulse Output

GPM/Pulse = K factor

| TVF Terminal | Wire Color | Description |
|--------------|------------|-------------|
| 7            | Blue       | -VDC        |
| 8            | Brown      | +VDC        |
| 10           | Black      | NPN Pulse   |

Jump 13 & 8

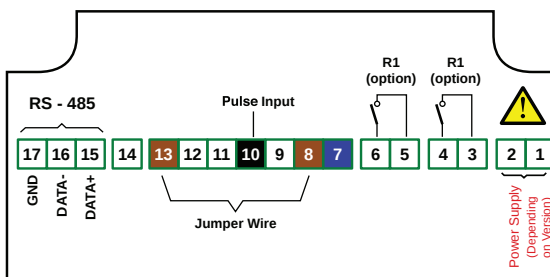


#### TKW Series : Pulse Output

GPM/Pulse = K factor

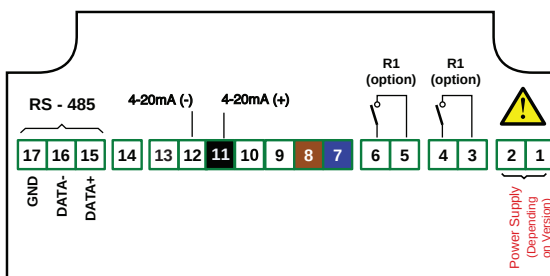
| TVF Terminal | Wire Color | Description |
|--------------|------------|-------------|
| 7            | Blue       | -VDC        |
| 8            | Brown      | +VDC        |
| 10           | Black      | Pulse       |

Jump 13 & 8



#### TKW Series : 4-20mA Output

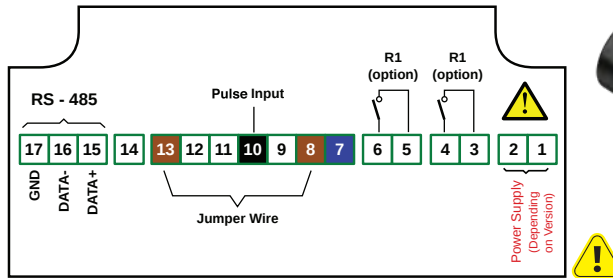
| TVF Terminal | Wire Color | Description |
|--------------|------------|-------------|
| 7            | Blue       | -VDC        |
| 8            | Brown      | +VDC        |
| 11           | Black      | mA+         |
| 12           | White      | mA-         |



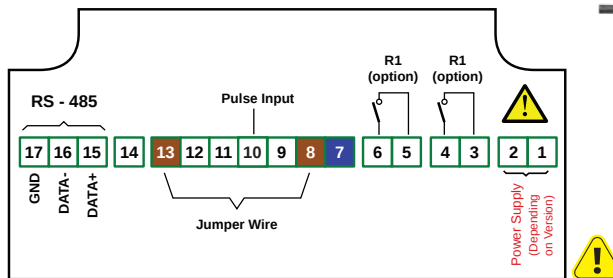
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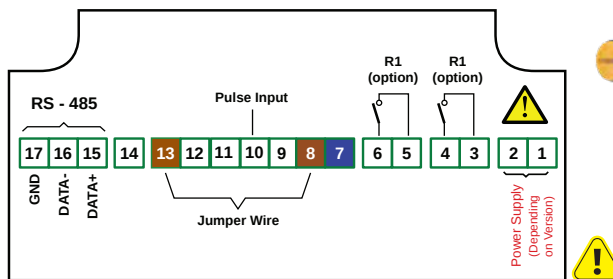
| TKM   TKP Series : Pulse Output |            |             |
|---------------------------------|------------|-------------|
| GPM/Pulse = K factor            |            |             |
| TVF Terminal                    | Wire Color | Description |
| 7                               | Blue       | -VDC        |
| 8                               | Brown      | +VDC        |
| 10                              | Black      | Pulse       |
| Jump 13 & 8                     |            |             |



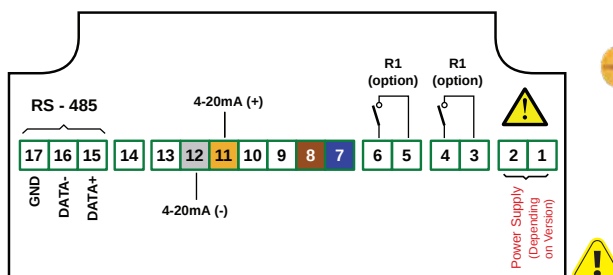
| TIW Series : Pulse Output |            |             |
|---------------------------|------------|-------------|
| GPM/Pulse = K factor      |            |             |
| TVF Terminal              | Wire Color | Description |
| 7                         | Blue       | -VDC        |
| 8                         | Brown      | +VDC        |
| 10                        | White      | Pulse       |
| Jump 13 & 8               |            |             |



| TIM   TIP Series : Pulse Output |            |             |
|---------------------------------|------------|-------------|
| GPM/Pulse = K factor            |            |             |
| TVF Terminal                    | Wire Color | Description |
| 7                               | Blue       | -VDC        |
| 8                               | Brown      | +VDC        |
| 10                              | White      | Pulse       |
| Jump 13 & 8                     |            |             |



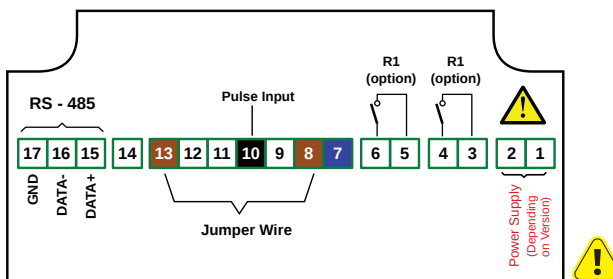
| TIM Series : 4-20mA Output |            |             |
|----------------------------|------------|-------------|
| TVF Terminal               | Wire Color | Description |
| 7                          | Blue       | -VDC        |
| 8                          | Brown      | +VDC        |
| 11                         | Yellow     | mA+         |
| 12                         | Grey       | mA-         |



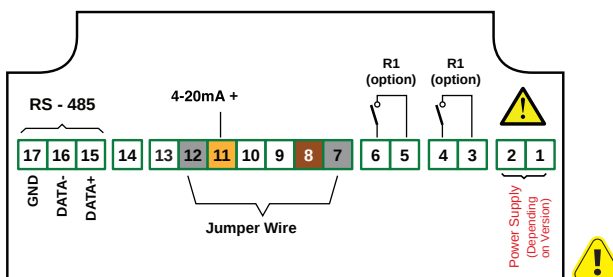
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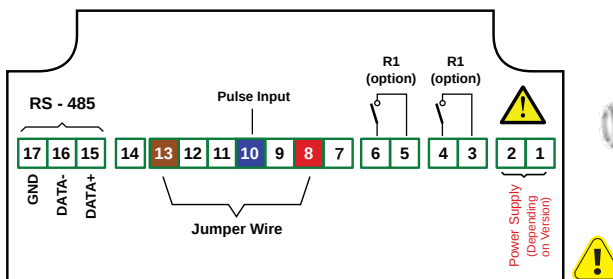
| UF 1000   4000   5000 – Pulse Output |     |             |
|--------------------------------------|-----|-------------|
| GPM/Pulse = K factor                 |     |             |
| TVF Terminal                         | Pin | Description |
| 8                                    | 1   | +VDC        |
| 10                                   | 2   | Pulse       |
| 7                                    | 3   | -VDC        |
| Jump 13 & 8                          |     |             |



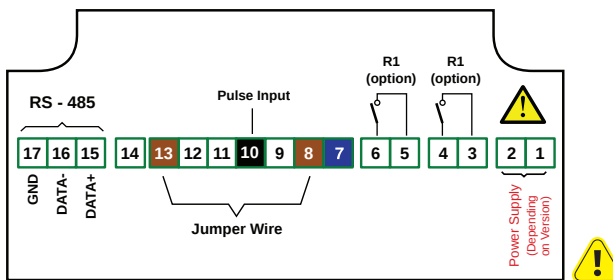
| UF 1000   4000   5000 – 4-20mA Output |     |             |
|---------------------------------------|-----|-------------|
| TVF Terminal                          | Pin | Description |
| 8                                     | 1   | +VDC        |
| 11                                    | 2   | +mA         |
| 7                                     | 3   | -VDC        |
| Jump 12 & 7                           |     |             |



| ProPulse (Flying Lead) – Pulse Output |            |             |
|---------------------------------------|------------|-------------|
| GPM/Pulse = K factor                  |            |             |
| TVF Terminal                          | Wire Color | Description |
| 7                                     | Shield     | -VDC        |
| 8                                     | Red        | +VDC        |
| 10                                    | Blue       | Pulse       |
| Jump 13 & 8                           |            |             |



| ProPulse®2 – Pulse Output |            |             |
|---------------------------|------------|-------------|
| TVF Terminal              | Wire Color | Description |
| 7                         | Blue       | -VDC        |
| 8                         | Brown      | +VDC        |
| 10                        | Black      | Pulse       |
| Jump 13 & 8               |            |             |



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### Programming K Factor (For Pulse Input Models)

| STEPS                                                                                                                                                                                                                                | DISPLAY                                                                             | OPERATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Main Display</b> ▶<br> <b>ESC MENU</b>  <b>3 SEC</b>          |    | <b>MAIN DISPLAY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>2 Relay 1</b> ▶<br>  <b>X 2</b>                                 |    | <b>RELAY 1 Settings</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>3 Input</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                             |    | <b>INPUT Menu</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>4 K Factor</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                          |    | Press  or  → Select <b>PULSEL</b> (K Factor)                                                                                                                                                                                                                                                                            |
| <b>5 K Factor Value</b> ▶<br> <b>ENTER PAUSE</b>  <b>2 SEC</b> |  | Enter <b>K FACTOR</b> Value<br>Press  or  to change digit<br>Press  to advance to next digit<br>Note: Enter the K Factor value according to the Flow Unit.<br>Eg: To display flow in GPM, Enter K Factor corresponding to GPM. |
| <b>6 Save Value</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                      |  | Save Selection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>7 K Factor</b> ▶<br> <b>ESC MENU</b>                                                                                                           |  | PULSEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>8 Input</b> ▶<br> <b>ESC MENU</b>                                                                                                              |  | Input Menu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>9 Main Display</b> ▶                                                                                                                                                                                                              |  | Main Display                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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### Programming 4-20mA Input (For 4-20mA Input Models)

| STEPS                                                                                                                                                                                                                         | DISPLAY                                                                             | OPERATION                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Main Display</b><br> <b>ESC MENU</b>  <b>3 SEC</b>     |    | <b>MAIN DISPLAY</b>                                                                                                                                                                                                                                                                                                                                                                             |
| <b>2 Relay 1</b><br>  <b>X 2</b>                            |    | <b>RELAY 1</b> Settings                                                                                                                                                                                                                                                                                                                                                                         |
| <b>3 Flow Menu</b><br> <b>ENTER PAUSE</b>                                                                                                    |    | <b>FLOW</b> Menu                                                                                                                                                                                                                                                                                                                                                                                |
| <b>4 Input Type</b><br>  <b>X 6</b>                         |    | <b>INPUT TYPE</b><br>Factory Default: 4-20mA                                                                                                                                                                                                                                                                                                                                                    |
| <b>5 Low Calibration (4mA)</b><br> <b>ENTER PAUSE</b>                                                                                      |  | <b>LOW CALIBRATION</b> Setting<br>Lo CAL = 4mA Value                                                                                                                                                                                                                                                                                                                                            |
| <b>6 4mA Value</b><br> <b>ENTER PAUSE</b>  <b>2 SEC</b> |  | Enter <b>4mA</b> Value<br>Factory Default: 000.0<br><div> Press  or  to change digit<br/> Press  to advance to next digit </div> |
| <b>7 Save Selection</b><br> <b>ENTER PAUSE</b>                                                                                             |  | Save Selection                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>8 Low Calibration (4mA)</b><br>                      |  | Low Calibration Setting                                                                                                                                                                                                                                                                                                                                                                         |
| <b>9 High Calibration (20mA)</b><br> <b>ENTER PAUSE</b>                                                                                    |  | <b>HIGH CALIBRATION</b> Setting<br>Hi CAL = 20mA Value                                                                                                                                                                                                                                                                                                                                          |

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| STEPS                                                                                                                                                                                                                                           | DISPLAY                                                                            | OPERATION                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>1020mA Value</div> <div><div>ENTER<br/>PAUSE</div><div>2 SEC</div></div> |   | <div>Enter <b>20mA</b> Value</div> <div>Factory Default: 100.0</div> <div>Press  or  to change digit</div> <div>Press  to advance to next digit</div> |
| <div>11Save Selection</div> <div><div>ENTER<br/>PAUSE</div></div>                                                                                              |   | Save Selection                                                                                                                                                                                                                                                                                                                                                                                                 |
| <div>12High Calibration (20mA)</div> <div><div>ESC<br/>MENU</div></div>                                                                                        |   | High Calibration Setting                                                                                                                                                                                                                                                                                                                                                                                       |
| <div>13Flow Menu</div> <div><div>ESC<br/>MENU</div></div>                                                                                                      |   | Flow Menu                                                                                                                                                                                                                                                                                                                                                                                                      |
| <div>14Main Display</div>                                                                                                                                                                                                                       |  | Main Display                                                                                                                                                                                                                                                                                                                                                                                                   |

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### Programming Relays

| STEPS                                                                                                                                                                                                                                                                                     | DISPLAY                                                                             | OPERATION                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Main Display</b><br>              |    | MAIN DISPLAY                                                                                                                                                                                                                                                                                                                                                   |
| <b>2 Relay 1</b><br>                                                                                                    |    | RELAY 1 Settings                                                                                                                                                                                                                                                                                                                                               |
| <b>3 Source</b><br>                                                                                                     |    | SOURCE Menu                                                                                                                                                                                                                                                                                                                                                    |
| <b>4 FLo   bAt   tot</b><br>                                                                                            |    | Press  or  → Select <b>FLo</b> (Flow)                                                                                                                                                    |
| <b>5 Save</b><br>                                                                                                   |  | Save Selection                                                                                                                                                                                                                                                                                                                                                 |
| <b>6 Source</b><br>                                                                                                 |  | Source                                                                                                                                                                                                                                                                                                                                                         |
| <b>7 Set Point 1</b><br>                                                                                            |  | SET POINT 1                                                                                                                                                                                                                                                                                                                                                    |
| <b>8 Set Point 1 Value</b><br>   |  | Enter <b>SET POINT 1</b> Value<br>Press  or  to change digit<br>Press  to advance to next digit |
| <b>9 Save</b><br>                                                                                                   |  | Save Value                                                                                                                                                                                                                                                                                                                                                     |
| <b>10 Set Point 1</b><br>                                                                                           |  | SET POINT 1                                                                                                                                                                                                                                                                                                                                                    |

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| STEPS                                | DISPLAY | OPERATION                                                                                       |
|--------------------------------------|---------|-------------------------------------------------------------------------------------------------|
| <b>11 Set Point 2</b><br>            |         | <b>SET POINT 2*</b><br>* Option available only when the MODE is set to In/Out                   |
| <b>12 Set Point 2 Value</b><br>2 SEC |         | Enter <b>SET POINT 2</b> Value<br>Press  or  to change digit<br>Press  to advance to next digit |
| <b>13 Save</b><br>                   |         | Save Value                                                                                      |
| <b>14 Set Point 2</b><br>            |         | Set Point 2                                                                                     |
| <b>15 Hysteresis</b><br>             |         | <b>HYSTERISIS</b> Menu                                                                          |
| <b>16 Hysteresis Value</b><br>2 SEC  |         | Enter <b>HYSTERISIS</b> Value<br>Press  or  to change digit<br>Press  to advance to next digit  |
| <b>17 Save</b><br>                   |         | Save Value                                                                                      |
| <b>18 Hysteresis</b><br>             |         | Hysteresis Menu                                                                                 |
| <b>19 Mode</b><br>                   |         | <b>MODE</b> Menu                                                                                |
| <b>20 On   Off   In   Out</b><br>    |         | Press  or  → Select <b>On   OFF   In   Out</b>                                                  |

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| STEPS                                                                                                                         | DISPLAY                                                                           | OPERATION      |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------|
| <div>21</div> <div>Save</div> <div></div>    |  | Save Selection |
| <div>22</div> <div>Mode</div> <div></div>    |  | Mode Menu      |
| <div>23</div> <div>Relay 1</div> <div></div> |  | Relay 1 Menu   |
| <div>24</div> <div>Main Display</div>                                                                                         |  | Main Display   |

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### Programming Batching

| STEPS                         | DISPLAY | OPERATION                                                     |
|-------------------------------|---------|---------------------------------------------------------------|
| 1 Main Display                |         | MAIN DISPLAY                                                  |
| ESC MENU 3 SEC                |         |                                                               |
| 2 Relay 1                     |         | RELAY 1 Settings                                              |
| ENTER PAUSE                   |         |                                                               |
| 3 Source                      |         | SOURCE Menu                                                   |
| ENTER PAUSE                   |         |                                                               |
| 4 FLo   bAt   tot             |         | Press  or  → Select <b>bAt</b> (Batch)                        |
| ENTER PAUSE                   |         |                                                               |
| 5 Save                        |         | Save Selection                                                |
| ENTER PAUSE                   |         |                                                               |
| 6 Source                      |         | Source Menu                                                   |
| ENTER PAUSE                   |         |                                                               |
| 7 Set Point                   |         | SET POINT                                                     |
| ENTER PAUSE                   |         |                                                               |
| 8 Set Point Value             |         | Enter <b>SET POINT</b> Value                                  |
| ENTER PAUSE 2 SEC             |         | Press  or  to change digit<br>Press  to advance to next digit |
| 9 Save                        |         | Save Value                                                    |
| ENTER PAUSE                   |         |                                                               |
| 10 Set Point                  |         | Set Point                                                     |
| ESC MENU                      |         |                                                               |
| 11 Relay 1                    |         | Relay 1 Menu                                                  |
| ESC MENU                      |         |                                                               |
| 12 Main Display               |         | Main Display                                                  |
| ENTER PAUSE                   |         |                                                               |
| 13 Batching Mode              |         | BATCHING MODE                                                 |
| ENTER PAUSE to start batching |         |                                                               |

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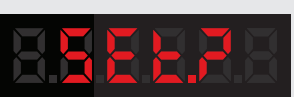
## Flow Display | Controller | Batcher

### Programming Output (For 4-20mA Output Models)

| STEPS                                                                                                                                                                                                                       | DISPLAY                                                                             | OPERATION                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Main Display</b> ▶<br> <b>ESC MENU</b>  <b>3 SEC</b> |    | <b>MAIN DISPLAY</b>                                                                                                                                                                                             |
| <b>2 Relay 1</b> ▶<br>  <b>x 9</b>                        |    | Relay 1 Settings                                                                                                                                                                                                |
| <b>3 Output</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                   |    | <b>OUTPUT</b> Menu                                                                                                                                                                                              |
| <b>4 Output Mode</b> ▶<br> <b>ENTER PAUSE</b>                                                                                              |    | <b>OUTPUT MODE</b>                                                                                                                                                                                              |
| <b>5 4-20mA</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                 |  | Press  or  → Select <b>4-20</b>       |
| <b>6 Save</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                   |  | Save Selection                                                                                                                                                                                                  |
| <b>7 Output Mode</b> ▶<br>                            |  | Select <b>OUTPUT MODE</b>                                                                                                                                                                                       |
| <b>8 Source</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                 |  | <b>SOURCE</b> Menu                                                                                                                                                                                              |
| <b>9 FLo   bAt   tot</b> ▶<br> <b>ENTER PAUSE</b>                                                                                        |  | Press  or  → Select <b>FLo</b> (Flow) |
| <b>10 Save</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                  |  | Save Selection                                                                                                                                                                                                  |

# LevelPro® — TVF Series

## Flow Display | Controller | Batcher

| STEPS                                                                                                                                                                                                                                                                               | DISPLAY                                                                             | OPERATION                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>11 Source</b> <br>                                                                                             |    | Source Menu                                                                                                                                                                                                                                                                                                                                             |
| <b>12 4mA</b> <br>                                                                                                |    | Setting <b>4mA (LOW VALUE)</b>                                                                                                                                                                                                                                                                                                                          |
| <b>13 4mA Value</b> <br>         |    | Enter <b>4mA Value</b><br>Press  or  to change digit<br>Press  to advance to next digit        |
| <b>14 Save</b> <br>                                                                                               |    | Save Value                                                                                                                                                                                                                                                                                                                                              |
| <b>15 4mA</b> <br>                                                                                              |   | 4mA (Low Value)                                                                                                                                                                                                                                                                                                                                         |
| <b>16 20mA</b> <br>                                                                                           |  | Setting <b>20mA (HIGH VALUE)</b>                                                                                                                                                                                                                                                                                                                        |
| <b>17 20mA Value</b> <br>  |  | Enter <b>20mA Value</b><br>Press  or  to change digit<br>Press  to advance to next digit |
| <b>18 Save</b> <br>                                                                                           |  | Save Value                                                                                                                                                                                                                                                                                                                                              |
| <b>19 20mA</b> <br>                                                                                           |  | 20mA (High value)                                                                                                                                                                                                                                                                                                                                       |
| <b>20 Output</b> <br>                                                                                         |  | Output Menu                                                                                                                                                                                                                                                                                                                                             |
| <b>21 Main Display</b>                                                                                                                                                                           |  | Main Display                                                                                                                                                                                                                                                                                                                                            |

# LevelPro® — TVF Series

## Flow Display | Controller | Batcher

### Resetting Batch

| STEPS                                                                                                                                                                                             | DISPLAY                                                                             | OPERATION                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Main Display</b>           |    | MAIN DISPLAY                                                                                                                                                                                     |
| <b>2 Relay 1</b>   X 4          |    | Relay 1 Settings                                                                                                                                                                                 |
| <b>3 Batch Settings</b>         |    | BATCH Menu                                                                                                                                                                                       |
| <b>4 Batch Resolution</b>   X 5 |    | BATCH RESOLUTION                                                                                                                                                                                 |
| <b>5 Mode Clear</b>         |  | MODE CLEAR                                                                                                                                                                                       |
| <b>6 oFF   on</b>           |  | Press  or  → Select on |
| <b>7 Save</b>               |  | Save Selection                                                                                                                                                                                   |
| <b>8 Mode Clear</b>         |  | Mode Clear                                                                                                                                                                                       |
| <b>9 Batch Settings</b>     |  | Batch Menu                                                                                                                                                                                       |
| <b>10 Main Display</b>      |  | Main Display                                                                                                                                                                                     |

# LevelPro® — TVF Series

## Flow Display | Controller | Batcher

| STEPS                                                                                                                                                                                                             | DISPLAY                                                                           | OPERATION                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>11 Batching Mode</b><br> <b>RESET</b>  3 SEC |  | <b>BATCHING MODE</b>  <p><b>Note:</b> Switching between Flow rate, Totalizer and Batching can be done by pressing <math>\Sigma</math>/RESET button. Kind of displayed value is signalled by "<math>\Sigma</math>" LED.</p> <p><math>\Sigma</math> LED ON : Totalizer   <math>\Sigma</math> LED OFF: Flow Rate   <math>\Sigma</math> LED Pulsing: Batching</p> |
| <b>12 Clear Batch</b><br> <b>ENTER PAUSE</b>                                                                                     |  | Clear Batch                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>13 Main Display</b>                                                                                                                                                                                            |  | Main Display                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### Resetting Totalizer

| STEPS                                                                                                                                                                                                                  | DISPLAY                                                                             | OPERATION                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Main Display</b><br> <b>ESC MENU</b>  3 SEC |  | <b>MAIN DISPLAY</b>                                                                                                                                                                                     |
| <b>2 Relay 1</b><br>  X 5                        |  | Relay 1 Settings                                                                                                                                                                                        |
| <b>3 Totalizer Menu</b><br> <b>ENTER PAUSE</b>                                                                                      |  | <b>TOTALIZER</b> Menu                                                                                                                                                                                   |
| <b>4 Totalizer Resolution</b><br>  X 5           |  | <b>BATCH RESOLUTION</b>                                                                                                                                                                                 |
| <b>5 Mode Clear</b><br> <b>ENTER PAUSE</b>                                                                                          |  | <b>MODE CLEAR</b>                                                                                                                                                                                       |
| <b>6 OFF   ON</b><br> <b>ENTER PAUSE</b>                                                                                            |  | Press  or  → Select <b>ON</b> |

# LevelPro® — TVF Series

## Flow Display | Controller | Batcher

| STEPS                                                                                                                                                     | DISPLAY                                                                             | OPERATION                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>7</div> <div>Save</div> <div>  </div>                               |    | Save Selection                                                                                                                                                                                                                                                                                                                                                        |
| <div>8</div> <div>Mode Clear</div> <div>  </div>                         |    | Mode Clear                                                                                                                                                                                                                                                                                                                                                            |
| <div>9</div> <div>Totalizer Menu</div> <div>  </div>                     |    | Totalizer Menu                                                                                                                                                                                                                                                                                                                                                        |
| <div>10</div> <div>Main Display</div> <div>  <div>X 2</div> </div>       |    | Main Display                                                                                                                                                                                                                                                                                                                                                          |
| <div>11</div> <div>Totalizer Mode</div> <div>  <div>3 SEC</div> </div> |   | <div> <div> <div>R1</div> <div>R2</div> <div>Σ</div> </div> <div> <b>TOTALIZER MODE</b><br/>           Note: Switching between Flow rate, Totalizer and Batching can be done by pressing Σ/RESET button. Kind of displayed value is signalised by "Σ" LED.<br/>           Σ LED ON : Totalizer   Σ LED OFF: Flow Rate   Σ LED Pulsing: Batching         </div> </div> |
| <div>12</div> <div>Clear</div> <div>  </div>                           |  | Clear Totalizer                                                                                                                                                                                                                                                                                                                                                       |
| <div>13</div> <div>Main Display</div>                                                                                                                     |  | Main Display                                                                                                                                                                                                                                                                                                                                                          |

# LevelPro® — TVF Series

## Flow Display | Controller | Batcher

### Setting Decimal Point

| STEPS                                                                                                                                                                                                                       | DISPLAY                                                                             | OPERATION                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Main Display</b> ▶<br> <b>ESC MENU</b>  <b>3 SEC</b> |    | <b>MAIN DISPLAY</b>                                                                                                                                                                                           |
| <b>2 Relay 1</b> ▶<br>  <b>x 3</b>                        |    | Relay 1 Settings                                                                                                                                                                                              |
| <b>3 Flow Menu</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                |    | <b>FLOW</b> Menu *                                                                                                                                                                                            |
| <b>4 Flow Precision</b> ▶<br> <b>ENTER PAUSE</b>                                                                                           |    | <b>FLOW PRECISION</b>                                                                                                                                                                                         |
| <b>5 Decimal Point</b> ▶<br> <b>ENTER PAUSE</b>                                                                                          |  | <b>DECIMAL POINT</b>                                                                                                                                                                                          |
|                                                                                                                                                                                                                             |  | Press  or  to change Decimcal Point |
| <b>6 Save</b> ▶<br> <b>ENTER PAUSE</b>                                                                                                   |  | Save Selection                                                                                                                                                                                                |
| <b>7 Flow Precision</b> ▶<br> <b>ESC MENU</b>                                                                                            |  | Flow Precision                                                                                                                                                                                                |
| <b>8 Flow Menu</b> ▶<br> <b>ESC MENU</b>                                                                                                 |  | Flow Menu                                                                                                                                                                                                     |
| <b>9 Main Display</b> ▶                                                                                                                                                                                                     |  | Main Display                                                                                                                                                                                                  |

\* To change decimal points for Batch | Totalizer, select Batch | Totalizer Menu

### Warranty, Returns and Limitations

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