

# Fluidwell reference guide



# Find the right Fluidwell for your application

# Fluidwell has a diverse portfolio of nearly 70 different products, but what product is the perfect fit for your application?

To support your selection, we have created this new reference guide. Each product group is explained with a list of typical features, photos and display examples. With a clear table overview you can easily compare the various options of the products.

to install

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to program



know them all!







Reliable



# Flow rate Indicators / Totalizers

The product group "Flow rate Indicators / Totalizers" offers an extensive range of solutions from a basic transmitter / totalizer up to a powerful flow rate monitor with flow curve linearization, flow rate monitoring, signal transmission, alarm and pulse outputs as well as Modbus or HART communication.

#### **Basic features**

- Key information at a glance, simultaneously showing flow rate, total and measuring units.
- Clear operator messages e.g. "low rate" or "alarm lo".
- "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Flow rate measuring units: mL, L, m<sup>3</sup>, mg, g, kg, ton, GAL, bbl, lb, cf, REV, scf, Nm<sup>3</sup>, NL, P or no unit. The flow rate can be calculated per sec, min, hour or day.
- The resettable total measuring units: ml, L, m<sup>3</sup>, GAL, USGAL, kg, lb, bbl or no unit.
- Ability to process all types of flow meter signals.
- Robust GRP, aluminum and Stainless steel 316L enclosures, resistant to harsh weather conditions.
- Easy mounting: on walls, pipes, panels or directly on flowmeter.
- Bright LED backlight.

- Linearization of the flow curve for accuracy in any flow range.
- Flow rate re-transmission, is offered with the analog output.
- Current daily, previous day and 15 historical day totals.
- Accumulated total re-transmission, with the scaled pulse output.
- · Unscaled pulse input retransmission.
- Flow rate monitoring with high/low flow rate alarm values and (multiple) digital alarm outputs.
- Red flashing backlight in case of an alarm situation.
- HART Communication allows you to easily communicate with smart "DD enabled host" systems.
- Modbus Communication or printer output.
- Data logging: Logged frequently, read out easily! With free downloadable software tool.
- Suitable for hazardous area applications with intrinsically safe and explosion proof approvals.
- Remote input to reset total.
- Piegraph or speedometer as graphical indication of the flow rate.
- USB port for remote configuration and data log extraction.
- Easy configurable via a pc with free downloadable software.



D-Series: DIN Panel mount Indicators



F-Series: Robust field mount Indicators



B-Series: Basic Field mount Indicators



E-Series: Explosion proof Totalizers

|                |                                       |        | Flow   | rate I        | ndica | tors | / Tot: | alizor | s .  |
|----------------|---------------------------------------|--------|--------|---------------|-------|------|--------|--------|------|
|                |                                       | U      | +      | þ             | ť     |      |        |        |      |
|                |                                       | B-Basi | B-Smar | B-<br>Connect | B-Ale | E018 | E110   | E112   | E115 |
| Input          | (0)4-20mA Input                       |        |        |               |       |      | •      | •      |      |
| ü              | Pulse Input                           | •      | •      | •             | •     | •    | •      | •      | •    |
|                | Actual flow rate                      | •      | •      | •             | •     | •    | •      | •      | •    |
|                | Actual total /<br>Accumulated total   | •      | •      | •             | •     | •    | •      | •      | •    |
| >              | Daily total /<br>Previous day total   |        |        |               |       | •    | •      | •      | •    |
| Display        | Simultaneous flow rate and total      |        |        |               |       | •    | •      | •      | •    |
|                | LED backlight                         | •      | •      | •             | •     | •    | •      | •      | •    |
|                | Red flashing<br>backlight             |        |        |               |       | •    |        |        |      |
|                | Piegraph / speedometer                |        |        |               |       | •    | •      | •      |      |
| Analog         | According to flow rate                |        | •      | •             |       | •    | •      | •      | •    |
| Ang            | HART communication                    |        |        |               |       | •    |        |        |      |
| Ħ              | Pulse outputs                         |        | 1      | 1             |       | 4    | 1      | 1      | 2    |
| outp           | Alarm outputs                         |        |        |               | 2     | 4    |        |        |      |
| Digital output | Pulse input retransmission            |        |        |               |       | •    | •      | •      | •    |
|                | Isolated / relay outputs              |        |        | •/-           |       | -/•  | -/•    | -/•    | -/•  |
| б              | Panel                                 |        |        |               |       |      |        |        |      |
| ounting        | Field / wall / pipe                   | •      | •      | •             | •     | •    | •      | •      | •    |
| MO             | Direct on flowmeter                   | •      | •      | •             | •     | •    | •      | •      | •    |
|                | Safe area                             | •      | •      | •             | •     |      |        |        |      |
| dous           | Intrinsically safe                    |        |        |               |       |      |        |        |      |
| Hazardous      | Class 1, Div. 2<br>Non-Incendive      |        |        |               |       |      |        |        |      |
|                | Explosion proof - touch through glass |        |        |               |       | •    | •      | •      | •    |
|                | Linearization                         |        |        |               |       | •    |        | •      |      |
|                | Dual flow inputs                      |        |        |               |       |      |        |        | •    |
|                | External reset total                  |        |        |               |       | •    | •      | •      | •    |
| Other          | Modbus communication                  |        |        |               |       |      | •      | •      | •    |
|                | Printer output                        |        |        |               |       |      |        |        |      |
|                | Datalogging                           |        |        |               |       |      | •      | •      |      |
|                | Stainless steel 316L enclosure        |        |        |               |       | •    | •      | •      | •    |



|                |  |      |      |      |      |      |      | Flo | w r  | ate  | Inc  | lica | tor      | s /  | Tot  | aliz | ers  |      |      |      |      |      |      |
|----------------|--|------|------|------|------|------|------|-----|------|------|------|------|----------|------|------|------|------|------|------|------|------|------|------|
|                |  | D010 | D011 | D012 | D013 | D014 | D016 | 0   | F011 | F012 | F013 | F014 | F016     | F018 | F103 | F110 | F111 | F112 | F113 | F115 | F117 | F118 | F119 |
| ts             | (0)4-20mA Input                          | •    | •    | •    | •    | •    |      | •   | •    | •    | •    | •    | <u>"</u> | ш.   | ш.   | •    |      | •    | •    |      |      |      |      |
| Flow Inputs    | Pulse Input                              | •    | •    | •    | •    | •    | •    | •   | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
| Flow           | 0 - 10V DC Input                         | •    | •    | •    | •    | •    |      | •   |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |
|                | Actual flow rate                         | •    |      | •    | •    | •    | •    | •   |      | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
|                | Actual total /<br>Accumulated total      |      | •    | •    | •    | •    | •    |     | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
|                | Daily total /<br>Previous day total      |      |      |      |      |      |      |     |      |      |      |      |          |      | •    |      |      |      |      |      |      |      | •    |
| Display        | Simultaneous flow rate and total         |      |      | •    | •    | •    | •    |     |      | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    |      | •    | •    |
|                | LED backlight                            | •    | •    | •    | •    | •    | •    | •   | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
|                | Red flashing<br>backlight                |      |      |      | •    |      |      |     |      |      | •    |      |          | •    |      |      |      |      |      |      |      |      |      |
|                | Piegraph /<br>speedometer                | •    |      |      |      |      |      | •   |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |
| Analog         | According to flow rate                   |      |      |      |      |      |      |     |      |      |      |      |          | •    | •    | •    |      | •    | •    | •    | •    | •    | •    |
| Ana            | HART communication                       |      |      |      |      |      |      |     |      |      |      |      |          | •    |      |      |      |      |      |      |      |      |      |
| Ħ              | Pulse outputs                            |      |      |      |      | 1    | 1    |     |      |      |      | 1    | 1        | 1    | 2    | 1    | 2    | 1    | 4    | 1    |      | 3    | 1    |
| Digital output | Alarm outputs                            |      |      |      | 1    |      |      |     |      |      | 1    |      |          | 1    |      |      |      |      | 4    |      | 2    | 3    |      |
| gital          | Pulse input retransmission               |      |      |      |      |      |      |     |      |      |      |      |          |      | •    |      |      |      |      |      |      |      |      |
| Ξ              | Isolated / relay outputs                 |      |      |      | -/•  | -/•  | -/•  |     |      |      | -/•  | -/•  | -/•      | -/•  | •/-  | -/•  | -/•  | -/•  | -/•  | -/•  | -/•  | -/•  |      |
| D<br>D         | Panel                                    | •    | •    | •    | •    | •    | •    | •   | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
| Mounti         | Field / wall / pipe                      |      |      |      |      |      |      | •   | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
| Σ              | Direct on flowmeter                      |      |      |      |      |      |      | •   | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
|                | Safe area                                | •    | •    | •    | •    | •    | •    | •   | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |
| rdous          | Intrinsically safe                       |      |      |      |      |      |      | •   | •    | •    | •    | •    | •        | •    |      | •    | •    | •    | •    | •    | •    | •    |      |
| Hazardous      | Class 1, Div. 2<br>Non-Incendive         |      |      |      |      |      |      |     |      |      |      |      |          |      | •    |      |      |      |      |      |      |      |      |
|                | Explosion proof -<br>touch through glass |      |      |      |      |      |      |     |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |
|                | Linearization                            |      |      |      |      |      | •    |     |      |      |      |      | •        | •    | •    |      |      | •    |      |      |      | •    | •    |
|                | Dual flow inputs                         |      |      |      |      |      |      |     |      |      |      |      |          |      |      |      | •    |      |      | •    | •    |      |      |
|                | External reset total                     |      |      |      |      |      |      |     |      |      |      |      |          |      | •    | •    |      | •    | •    |      |      |      | •    |
| Other          | Modbus<br>communication                  |      |      |      |      |      |      |     |      |      |      |      |          |      | •    | •    | •    | •    | •    | •    | •    | •    | •    |
|                | Printer output                           |      |      |      |      |      |      |     |      |      |      |      |          |      |      |      |      |      |      |      |      |      | •    |
|                | Datalogging                              |      |      |      |      |      |      |     |      |      |      |      |          |      | •    |      |      |      |      |      |      |      |      |
|                | Stainless steel 316L enclosure           |      |      |      |      |      |      | •   | •    | •    | •    | •    | •        | •    | •    | •    | •    | •    | •    | •    | •    | •    | •    |



|                |  |      |      |      |         |         | FI   | ow   | Со   | mp   | ute  | rs   |      |      |         |         |      |
|----------------|--|------|------|------|---------|---------|------|------|------|------|------|------|------|------|---------|---------|------|
|                |  | D016 | E018 | E112 | E126-EL | E126-EG | F016 | F018 | F103 | F112 | F114 | F116 | F118 | F119 | F126-EL | F126-EG | F127 |
| Input          | (0)4-20mA Input                            |      |      | •    |         |         |      |      |      | •    |      |      |      |      |         |         |      |
| Ing            | Pulse Input                                | •    | •    | •    | •       | •       | •    | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
|                | Actual flow rate                           | •    | •    | •    | •       | •       | •    | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
|                | Actual total (resettable)                  | •    | •    | •    | •       | •       | •    | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
| olay           | Accumulated total (non-resettable)         | •    | •    | •    | •       | •       | •    | •    | •    | •    |      | •    | •    | •    | •       | •       | •    |
| Display        | Daily total /<br>Previous day total        |      |      | •    | •       | •       |      |      | •    |      |      |      |      | •    |         |         |      |
|                | LED backlight                              | •    | •    | •    | •       | •       | •    | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
|                | Red flashing<br>backlight                  |      | •    |      |         |         |      | •    |      |      |      |      |      |      |         |         |      |
| gol            | According to (compensated) flow rate       |      | •    | •    | •       | •       |      | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
| Analog         | HART communication                         |      | •    |      |         |         |      | •    |      |      |      |      |      |      |         |         |      |
| ¥              | Pulse outputs                              | 1    | 4    | 1    | 1       | 1       | 1    | 1    | 2    | 1    |      | 1    | 3    | 1    | 1       | 1       | 2    |
| outpi          | Alarm outputs                              |      | 4    |      |         |         |      | 1    |      |      | 3    |      | 3    |      |         |         |      |
| Digital output | Pulse input retransmission                 |      | •    | •    | •       | •       |      |      | •    |      |      |      |      |      |         |         |      |
| Δ              | Isolated / relay<br>outputs                | -/•  | -/•  | -/•  | -/•     | -/•     | -/•  | -/•  | •/-  | -/•  | -/•  | -/•  | -/•  |      | -/•     | -/•     | -/•  |
| Mounting       | Panel                                      | •    |      |      |         |         | •    | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
| Mour           | Field / wall / pipe<br>Direct on flowmeter |      | •    | •    | •       | •       | •    | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
|                | Safe area                                  | •    |      |      |         |         | •    | •    | •    | •    | •    | •    | •    | •    | •       | •       | •    |
| rdous          | Intrinsically safe                         |      |      |      |         |         | •    | •    |      | •    | •    | •    | •    |      | •       | •       | •    |
| Hazardous      | Class 1, Div. 2<br>Non-Incendive           |      |      |      |         |         |      |      | •    |      |      |      |      |      |         |         |      |
|                | Explosion proof - touch through glass      |      | •    | •    | •       | •       |      |      |      |      |      |      |      |      |         |         |      |
|                | Linearization                              | •    | •    | •    |         |         | •    | •    | •    | •    |      |      | •    | •    |         |         |      |
|                | Multiple inputs                            |      |      |      | •       | •       |      |      |      |      | •    | •    |      |      | •       | •       | •    |
|                | External reset total                       |      | •    | •    | •       | •       |      |      | •    | •    |      |      |      | •    |         |         |      |
| Other          | USB communication                          |      |      | •    | •       | •       |      |      |      |      |      |      |      |      |         |         |      |
| Ot             | Modbus<br>communication                    |      |      | •    | •       | •       |      |      | •    | •    | •    | •    | •    | •    | •       | •       | •    |
|                | Printer output                             |      |      |      |         |         |      |      |      |      |      |      |      | •    |         |         |      |
|                | Datalogging                                |      |      | •    |         |         |      |      | •    |      |      |      |      |      |         |         |      |
|                | Temperature / Pressure<br>Compensation     |      |      |      | •/-     | •/•     |      |      |      |      |      |      |      |      | •/-     | •/•     | •/-  |
|                |  |      |      |      |         |         |      |      |      |      |      |      |      |      |         |         |      |

# Flow Computers

The product group "Flow Computers" offers an addition to the range of Flow rate Indicators / totalizers. It incorporates most basic and advanced features and adds smart functionality like linearization of the flow curve temperature and pressure compensation, consumption calculation or ratio monitoring (fuel). This is one of our most advanced product ranges.

# **Functionality**

- F114: Ratio monitor / totalizer with high / low alarms and analog outputs.
- F116 / F127: Calculate differential / consumption total of two flows.
- E126 / F126 EL: Temperature compensation for corrected liquid volume.
- E126 / F126 EG: Temperature and pressure compensation for corrected gas volume.
- Linearization of the flow curve for accuracy in any flow range.

- LED backlight ensuring perfect readings in all lighting conditions.
- HART Communication allows you to easily communicate with smart "DD enabled host" systems.
- Data logging: Logged frequently, read out easily! With free downloadable software tool.
- Intrinsically safe available for hazardous area applications.



F-Series: Robust field mount Indicators



E-Series: Explosion proof Totalizers



D-Series: DIN Panel mount Indicators



|             |   |                  |      | E    | Bato | ch C | Con  | tro  | ller | S    |                                       |      |
|-------------|---|------------------|------|------|------|------|------|------|------|------|---------------------------------------|------|
|             |   | B-In-<br>Control | D030 | F030 | F130 | F131 | F132 | F133 | F136 | N410 | N413                                  | N414 |
| uts         | (0)4-20mA Input                             |                  | •    | •    |      | •    |      |      |      |      |                                       |      |
| Flow inputs | Pulse Input                                 | •                | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
| Flo         | 0 - 10V DC Input                            |                  | •    |      |      |      |      |      |      |      |                                       |      |
|             | Preset value                                | •                | •    | •    | •    | •    | •    |      | •    | •    | •                                     | •    |
|             | Running batch                               | •                | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
|             | Batch process indicator                     |                  |      |      |      |      |      |      |      | •    | •                                     | •    |
| olay        | Actual flow rate                            |                  |      |      |      | •    |      | •    |      | •    | •                                     | •    |
| Display     | Actual total (resettable)                   | •                | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
|             | Accumulated total (non-resettable)          | •                | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
|             | Preset and actual batch simultaneously      | •                | •    | •    | •    | •    | •    |      | •    | •    | •                                     | •    |
|             | LED backlight                               | •                | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
| log         | According to flow rate                      |                  |      |      |      | •    |      |      |      |      |                                       |      |
| Analog      | According to batch                          |                  |      |      |      |      |      |      | •    |      | • • • • • • • • • • • • • • • • • • • |      |
|             | Pulse outputs                               |                  |      |      | 1    | 1    |      |      | 1    | 1    | 3                                     | 3    |
| ¥           | Alarm outputs                               |                  |      |      |      |      |      |      |      | 1    | 3                                     | 3    |
| ital output | 1 stage / 2 stage<br>batch control          | •/•              | •/-  | •/-  | •/•  | •/•  | •/•  | -/•  | •/•  | •/•  | •/•                                   | •/•  |
| gital       | Number of outputs                           | 2                | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 3    | 5                                     | 5    |
| Dig         | Pump Control                                |                  |      |      |      |      |      |      |      |      | •                                     | •    |
|             | Relay outputs                               |                  | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
| nting       | Panel                                       |                  | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
| Mounting    | Field / wall / pipe                         | •                |      | •    | •    | •    | •    | •    | •    |      |                                       |      |
| sno         | Safe area                                   | •                | •    | •    | •    | •    | •    | •    | •    | •    | •                                     | •    |
| Hazardous   | Intrinsically safe                          |                  |      | •    | •    | •    | •    | •    | •    |      |                                       |      |
| Haz         | Explosion proof -<br>Rugged 15 Kg enclosure |                  |      | •    | •    | •    | •    | •    | •    |      |                                       |      |
|             | Receipt printer<br>driver                   |                  |      |      |      |      | •    |      |      |      | •                                     | •    |
|             | Remote inputs                               |                  |      |      | 2    | 2    | 2    | 2    | 2    | 5    | 5                                     | 5    |
| Other       | Modbus<br>communication                     |                  |      |      | •    | •    |      | •    | •    | •    |                                       |      |
|             | NTEP certification                          |                  |      |      |      |      |      |      |      |      |                                       | •    |
|             | Delivery controller                         |                  |      |      |      |      |      | •    |      |      |                                       |      |

## **Batch Controllers**

The product group "Batch Controllers" offers various products within the N-Series, F-Series, D-Series and B-Series product ranges. Several options are available for more demanding batch control applications like two-stage control, userfriendly numerical keypad and receipt printing functionality. The Delivery Controller is specially designed for the delivery of unknown quantities.

#### **Basic features**

- Key information at a glance, simultaneously showing preset and actual total with measuring units.
- Clear operator messages e.g. "press stop".
- "Know one, know them all" configuration structure, saving time, cost and aggravation.
- · Ability to process all types of flow meter signals.
- Robust GRP, aluminum and Stainless steel 316L enclosures, resistant to harsh weather conditions.
- Suitable for hazardous area applications with intrinsically safe and explosion proof approvals.
- Entering the preset is a basic function, easy for every operator.
- For repeatable batches it is not required to reenter the preset value, simply press start.
- Self-learning overrun correction for repeatable results under varying conditions.

- Numerical keypad for easy changing of the preset.
- Receipt printing for a ticket after each batch.
- Pump control with on/off time delay function.
- Remote inputs to start, pause or stop a batch.
- Graphical indication of the batch process.
- LED backlight.
- No-flow monitoring.
- · Analog output with flow rate or batch re-transmission.
- Total re-transmission, is offered with the scaled pulse output.
- Modbus Communication.
- Intrinsically safe available.
- Approved for weighing and measuring with NTEP certification.



N-Series: Batch Controllers



F-Series: Robust field mount Indicators



D-Series: DIN Panel mount Indicators



B-Series: Basic Field mount Indicators



|                       |   | Process<br>Controllers |      |      |      |  |  |  |
|-----------------------|---|------------------------|------|------|------|--|--|--|
|                       |   | Cc                     | ntr  | olle | ers  |  |  |  |
|                       |   | D074                   | F074 | F120 | F124 |  |  |  |
| outs                  | (0)4-20mA Input                             | •                      | •    |      |      |  |  |  |
| Flow inputs           | Pulse Input                                 |                        |      | •    | •    |  |  |  |
| H <sub>O</sub> H      | 0 - 10V DC Input                            | •                      |      |      |      |  |  |  |
|                       | Level                                       | •                      | •    |      |      |  |  |  |
| >                     | Actual total (resettable)                   |                        |      | •    |      |  |  |  |
| Display               | Actual flow rate                            |                        |      | •    | •    |  |  |  |
|                       | Ratio                                       |                        |      |      | •    |  |  |  |
|                       | LED backlight                               | •                      | •    | •    | •    |  |  |  |
| alog                  | To control<br>flow rate                     |                        |      | •    |      |  |  |  |
| Ani                   | To control ratio                            |                        |      |      | •    |  |  |  |
| Digital output Analog | Level control outputs                       | 1                      | 1    |      |      |  |  |  |
| tal ou                | Alarm outputs                               |                        |      | 2    | 2    |  |  |  |
| Digi                  | Relay outputs                               |                        |      | 2    | 2    |  |  |  |
| ng                    | Panel                                       | •                      | •    | •    | •    |  |  |  |
| Mounting              | Field / wall / pipe                         |                        | •    | •    | •    |  |  |  |
| Σ                     | Direct on flowmeter                         |                        | •    | •    | •    |  |  |  |
| snc                   | Safe area                                   | •                      | •    | •    | •    |  |  |  |
| lazard                | Intrinsically safe                          |                        | •    | •    | •    |  |  |  |
| Η̈́                   | Explosion proof -<br>Rugged 15 Kg enclosure |                        | •    | •    | •    |  |  |  |
|                       | Safety input                                |                        |      | •    | •    |  |  |  |
|                       | Dual flow inputs                            |                        |      |      | •    |  |  |  |
| _                     | External reset total                        |                        |      | •    |      |  |  |  |
| Other                 | Modbus<br>communication                     |                        |      | •    | •    |  |  |  |
|                       | Level / pump<br>controller                  | •                      | •    |      |      |  |  |  |
|                       | Flow rate controller                        |                        |      | •    |      |  |  |  |
|                       | Ratio controller                            |                        |      |      | •    |  |  |  |
|                       |   |                        |      |      |      |  |  |  |

## **Process Controllers**

The product group "Process Controllers" offers an addition to the range Flow rate Indicators / totalizers. It incorporates most basic and advanced features and adds smart functionality to control your process variables. Typical applications can be found on locations where reliable and constant process variables are required. This is one of our most advanced product ranges.

# **Functionality**

- D074 / F074: Level / pump controller with one control output.
- F120: Flow rate controller with analog control output and digital high / low alarm outputs.
- F124: Ratio controller with analog control output and digital high / low alarm outputs.

- Key information at a glance, simultaneously showing process variables and measuring units.
- Clear operator messages e.g. "alarm lo".
- "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Ability to process all types of sensor input signals.
- Intrinsically safe available for hazardous area applications.



F-Series: Robust field mount Indicators



D-Series: DIN Panel mount Indicators



F124 display



F120 display



F074 / D074 display



Easy menu structure



|           |   | Multi<br>Purpose<br>Displays |      |              |             |      |      |  |  |  |  |
|-----------|---|------------------------------|------|--------------|-------------|------|------|--|--|--|--|
|           |   | 0600                         | D490 | 0604<br>0604 | 1ay<br>2604 | F490 | F190 |  |  |  |  |
| out       | (0)4-20mA Input                             | •                            | •    | •            |             | •    | •    |  |  |  |  |
| Input     | Pulse Input                                 |                              |      |              | •           |      |      |  |  |  |  |
|           | Actual value                                | •                            | •    | •            |             | •    | •    |  |  |  |  |
|           | Alarm values                                |                              |      |              | •           |      | •    |  |  |  |  |
|           | Engine speed and running hours              |                              |      |              | •           |      |      |  |  |  |  |
|           | LED backlight                               | •                            | •    | •            | •           | •    | •    |  |  |  |  |
| Display   | Red flashing<br>backlight                   |                              |      |              | •           |      | •    |  |  |  |  |
| Disp      | Pie graph indicator                         | •                            | •    | •            |             | •    |      |  |  |  |  |
|           | Display with large digits                   | •                            | •    | •            |             | •    |      |  |  |  |  |
|           | Configurable alarm indication               |                              |      |              |             |      | •    |  |  |  |  |
|           | Wide range of measuring units               | •                            | •    | •            |             | •    | •    |  |  |  |  |
|           | Custom<br>measuring units                   |                              |      |              |             |      | •    |  |  |  |  |
|           | Analog output                               |                              |      |              |             |      | 1    |  |  |  |  |
| Outputs   | Alarm outputs                               |                              |      |              | 1           |      | 4    |  |  |  |  |
| Out       | Relay outputs                               |                              |      |              |             |      | 4    |  |  |  |  |
|           | Configurable hysteresis                     |                              |      |              |             |      | •    |  |  |  |  |
| g(        | Panel                                       | •                            | •    | •            | •           | •    | •    |  |  |  |  |
| Mounting  | Field / wall / pipe                         |                              |      | •            | •           | •    | •    |  |  |  |  |
| Σ         | Direct on sensor                            |                              |      | •            | •           | •    | •    |  |  |  |  |
| Sno       | Safe area                                   | •                            | •    | •            | •           | •    | •    |  |  |  |  |
| Hazardous | Intrinsically safe                          |                              | •    | •            | •           | •    | •    |  |  |  |  |
| Haz       | Explosion proof -<br>Rugged 15 Kg enclosure |                              |      |              | •           |      | •    |  |  |  |  |
|           | Loop powered indicator                      | •                            | •    | •            |             | •    | •    |  |  |  |  |
| ıer       | Tachometer monitor                          |                              |      |              | •           |      |      |  |  |  |  |
| Other     | Modbus<br>communication                     |                              |      |              |             |      | •    |  |  |  |  |
|           | Voltage drop<br>< 1V DC                     |                              | •    |              |             | •    |      |  |  |  |  |

# **Multi Purpose Displays**

The product group "Multi Purpose Displays" offers several models which can be used for various kinds of applications. They all have the basic features in common which are typical to a Fluidwell product. The functionality of these products will vary from a basic loop powered indicator to a Modbus display with alarm, control and analog outputs.

# **Functionality**

- F090 / D090: Basic loop powered, multi purpose indicator.
- F093: Tachometer monitor, displays engine speed and running hours with alarm output.
- F490/D490: Universal loop powered indicator for multi purposes.
- F190: Multi purpose monitor with alarm outputs and configurable hysteresis.

#### **Features**

- Key information at a glance, simultaneously showing process variables and measuring units.
- Clear operator messages e.g. "alarm lo".
- "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Ability to process all types of sensor input signals.
- Robust GRP, aluminum and Stainless steel 316L enclosures, resistant to harsh weather conditions.
- Suitable for a wide range of applications with diverse mounting possibilities: walls, pipes, panels or directly onto outdoor sensors.
- · Piegraph as graphical indication of the measured value.
- Intrinsically safe available for hazardous area applications.
- LED backlight ensuring perfect readings in all lighting conditions.
- Wide range of engineering units for e.g. level, temperature and pressure and other applications.
- Configurable hysteresis modes for alarm set- and resetpoints.



F-Series: Robust field mount Indicators



D-Series: DIN Panel mount Indicators



F090 / D090 display



F190 display



|           |   |      |      |      | Lev  | ∕el I | ndi  | cat  | ors  |      |      |      |
|-----------|---|------|------|------|------|-------|------|------|------|------|------|------|
|           |   | D070 | D073 | D074 | D077 | F070  | F073 | F074 | F077 | F170 | F173 | F190 |
|           | (0)4-20mA Input                             | •    | •    | •    | •    | •     | •    | •    | •    | •    | •    | •    |
| Input     | Reed chain resistance input                 |      |      |      |      |       | •    |      |      |      |      |      |
|           | 0 - 10V DC Input                            | •    | •    | •    | •    | •     |      |      |      |      |      |      |
|           | Actual level                                | •    | •    | •    | •    | •     | •    | •    | •    | •    | •    | •    |
|           | Actual height                               | •    | •    |      | •    | •     | •    |      | •    | •    | •    | •    |
|           | Percentage filled                           | •    | •    |      | •    | •     | •    |      | •    | •    | •    | •    |
| · >       | Preset value                                |      |      | •    |      |       |      | •    |      |      |      |      |
| Display   | LED backlight                               | •    | •    | •    | •    | •     | •    | •    | •    | •    | •    | •    |
|           | Red flashing<br>backlight                   |      | •    |      | •    |       | •    |      | •    | •    | •    | •    |
|           | Pie graph indicator<br>+ large digits       | •    |      |      |      | •     |      |      |      |      |      |      |
|           | Configurable alarm indication               |      |      |      |      |       |      |      |      |      |      | •    |
|           | Custom<br>measuring units                   |      |      |      |      |       |      |      |      |      |      | •    |
|           | Analog output                               |      |      |      |      |       |      |      |      | 1    | 1    | 1    |
| ţs        | Control outputs                             |      |      | 1    |      |       |      | 1    |      |      |      |      |
| Outputs   | Alarm outputs                               |      | 1    |      | 1    |       | 1    |      | 1    | 4    | 4    | 4    |
| 0         | Relay outputs                               |      |      |      |      |       |      |      |      | 4    | 4    | 4    |
|           | Configurable<br>hysteresis                  |      |      |      |      |       |      |      |      |      |      | •    |
| Bu        | Panel                                       | •    | •    | •    | •    | •     | •    | •    | •    | •    | •    | •    |
| Mounting  | Field / wall / pipe                         |      |      |      |      | •     | •    | •    | •    | •    | •    | •    |
| Σ         | Direct on sensor                            |      |      |      |      | •     | •    | •    | •    | •    | •    | •    |
| Sno       | Safe area                                   | •    | •    | •    | •    | •     | •    | •    | •    | •    | •    | •    |
| Hazardous | Intrinsically safe                          |      |      |      |      | •     | •    | •    | •    | •    | •    | •    |
| Ha.       | Explosion proof -<br>Rugged 15 Kg enclosure |      |      |      |      | •     | •    | •    | •    | •    | •    | •    |
| er        | Linearization                               |      |      |      | •    |       |      |      | •    |      | •    |      |
| Other     | Modbus<br>communication                     |      |      |      |      |       |      |      |      | •    | •    | •    |

#### **Level Indicators**

The product group "Level Indicators" offers a range of indicators, transmitters and monitoring systems for level measurement applications.

From a basic level indicator up to a powerful level monitor with tank shape linearization, high / low level monitoring, signal transmission, four alarm outputs as well as full Modbus communication.

## **Basic features**

- Key information at a glance, simultaneously showing level, measuring units, percentage and alarm messages.
- Clear operator messages e.g. "low level" or "alarm lo".
- Know one, know them all" configuration structure, saving time, cost and aggravation.
- Robust GRP, aluminum and Stainless steel 316L enclosures, resistant to harsh weather conditions.
- Easy mounting: on walls, pipes, panels or directly on sensor.
- The level engineering units: ml, L, m<sup>3</sup>, GAL, USGAL, kg, lb, bbl or no unit.
- The height engineering units: mm, cm, m, mtr, inch, ft, mmwk, mmwc, cmwk, cmwc, mwk, mwc, inwc, ftwc, mbar, bar, psi, percentage or no unit.

- Linearization to compensate the tank shape for accurate level measurement.
- Level re-transmission, is offered with the analog output.
- Level monitoring with high/low alarm values and (multiple) digital alarm outputs.
- LED backlight ensuring perfect readings in all lighting conditions.
- Red flashing backlight in case of an alarm situation.
- Modbus Communication.
- Intrinsically safe available for hazardous area applications.
- Piegraph as graphical indication of the actual level.
- Ignore function to allow an incorrect level for a certain period.
- Custom measuring unit with max. 8 characters.
- Configurable hysteresis modes for alarm set- and resetpoints.











F-Series: Robust field mount Indicators



|           |   |      | Temperature Indicators    OF   OF   OF   OF |      |      |      |  |  |  |  |
|-----------|---|------|---|------|------|------|--|--|--|--|
|           |   | D040 | D043  | F040 | F043 | F190 |  |  |  |  |
|           | (0)4-20mA Input                             | •    | •   | •    | •    | •    |  |  |  |  |
| Input     | PT100 input                                 |      |   | •    | •    |      |  |  |  |  |
|           | 0 - 10V DC Input                            | •    | •   |      |      |      |  |  |  |  |
|           | Actual tempera-<br>ture                     | •    | •   | •    | •    | •    |  |  |  |  |
|           | Alarm values                                |      | •   |      | •    | •    |  |  |  |  |
|           | LED backlight                               | •    | •   | •    | •    | •    |  |  |  |  |
| λŧ        | Red flashing<br>backlight                   |      | •   |      | •    | •    |  |  |  |  |
| Jisplay   | Pie graph indicator                         | •    |   | •    |      |      |  |  |  |  |
|           | Display with large digits                   | •    |   | •    |      |      |  |  |  |  |
|           | Configurable alarm indication               |      |   |      |      | •    |  |  |  |  |
|           | Wide range of measuring units               |      |   |      |      | •    |  |  |  |  |
|           | Custom<br>measuring units                   |      |   |      |      | •    |  |  |  |  |
|           | Analog outputs                              |      |   |      |      | 1    |  |  |  |  |
| Outputs   | Alarm outputs                               |      | 1   |      | 1    | 4    |  |  |  |  |
| Out       | Relay outputs                               |      |   |      |      | 4    |  |  |  |  |
|           | Configurable hysteresis                     |      |   |      |      | •    |  |  |  |  |
| ng        | Panel                                       | •    | •   | •    | •    | •    |  |  |  |  |
| Mountii   | Field / wall / pipe                         |      |   | •    | •    | •    |  |  |  |  |
| Σ         | Direct on sensor                            |      |   | •    | •    | •    |  |  |  |  |
| sno       | Safe area                                   | •    | •   | •    | •    | •    |  |  |  |  |
| Hazardous | Intrinsically safe                          |      |   | •    | •    | •    |  |  |  |  |
| На        | Explosion proof -<br>Rugged 15 Kg enclosure |      |   | •    | •    | •    |  |  |  |  |
| Other     | Loop powered indicator                      |      |   |      |      | •    |  |  |  |  |
| ot        | Modbus communication                        |      |   |      |      | •    |  |  |  |  |

# **Temperature Indicators**

The product group "Temperature Indicators" offers a range of indicators, transmitters and monitoring systems for temperature measurement applications. From a basic temperature indicator up to a powerful temperature monitor with high / low level monitoring, signal transmission, four alarm outputs as well as full Modbus communication.

#### **Basic features**

- Key information at a glance, simultaneously showing temperature, measuring units, and alarm messages.
- Clear operator messages e.g. "low temp" or "alarm lo".
- "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Robust GRP, aluminum and Stainless steel 316L enclosures, resistant to harsh weather conditions.
- Easy mounting: on walls, pipes, panels or directly on sensor.
- The temperature engineering units: °C, °F, K or no unit.

## Advanced features

- Temperature re-transmission, is offered with the analog output.
- Temperature monitoring with high/low alarm values and (multiple) digital alarm outputs.
- LED backlight ensuring perfect readings in all lighting conditions.
- Modbus Communication.
- Intrinsically safe available for hazardous area applications.
- Piegraph as graphical indication of the actual temperature.
- · Custom measuring unit with max. 8 characters.
- Configurable hysteresis modes for alarm set- and resetpoints.



F-Series: Robust field mount Indicators



F040 / D040 display



F043 / D043 display

D-Series: DIN Panel

mount Indicators



F190 display



Easy menu structure



|           |   |      | Pre<br>Ind | essi<br>icat |      | ;    |
|-----------|---|------|------------|--------------|------|------|
|           |   | D050 | D053       | F050         | F053 | F190 |
| out       | (0)4-20mA Input                             | •    | •          | •            | •    | •    |
| Input     | 0 - 10V DC Input                            | •    | •          |              |      |      |
|           | Actual pressure                             | •    | •          | •            | •    | •    |
|           | Alarm values                                |      | •          |              | •    | •    |
|           | LED backlight                               | •    | •          | •            | •    | •    |
| >         | Red flashing<br>backlight                   |      | •          |              | •    | •    |
| Jisplay   | Pie graph indicator                         | •    |            | •            |      |      |
|           | Display with large digits                   | •    |            | •            |      |      |
|           | Configurable alarm indication               |      |            |              |      | •    |
|           | Wide range of measuring units               |      |            |              |      | •    |
|           | Custom<br>measuring units                   |      |            |              |      | •    |
|           | Analog outputs                              |      |            |              |      | 1    |
| outs      | Alarm outputs                               |      | 1          |              | 1    | 4    |
| Outputs   | Relay outputs                               |      |            |              |      | 4    |
|           | Configurable<br>hysteresis                  |      |            |              |      | •    |
| <u> </u>  | Panel                                       | •    | •          | •            | •    | •    |
| ountir    | Field / wall / pipe                         |      |            | •            | •    | •    |
| Σ         | Direct on sensor                            |      |            | •            | •    | •    |
| sno       | Safe area                                   | •    | •          | •            | •    | •    |
| Hazardous | Intrinsically safe                          |      |            | •            | •    | •    |
| Ha        | Explosion proof -<br>Rugged 15 Kg enclosure |      |            | •            | •    | •    |
| ther      | Loop powered indicator                      |      |            |              |      | •    |
| Oth       | Modbus<br>communication                     |      |            |              |      | •    |
|           |   |      |            |              |      |      |

## **Pressure Indicators**

The product group "Pressure Indicators" offers a range of indicators, transmitters and monitoring systems for pressure measurement applications. From a basic pressure indicator up to a powerful pressure monitor with high / low level monitoring, signal transmission, four alarm outputs as well as full Modbus communication.

#### **Basic features**

- Clear operator messages e.g. "low pressure" or "alarm lo".
- Key information at a glance, simultaneously showing pressure, measuring units and alarm messages.
- "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Robust GRP, aluminum and Stainless steel 316L enclosures, resistant to harsh weather conditions.
- Easy mounting: on walls, pipes, panels or directly on sensor.
- The pressure engineering units: mbar, bar, psi or no unit.

- Pressure re-transmission, is offered with the analog output.
- Pressure monitoring with high/low alarm values and (multiple) digital alarm outputs.
- LED backlight ensuring perfect readings in all lighting conditions.
- Modbus Communication.
- Intrinsically safe available for hazardous area applications.
- Piegraph as graphical indication of the actual pressure.
- Custom measuring unit with max. 8 characters.
- Configurable hysteresis modes for alarm set- and resetpoints.



F-Series: Robust field mount Indicators



D-Series: DIN Panel mount Indicators



F050 / D050 display



F053 / D053 display



F190 display



Easy menu structure



# **N-Series: Batch Controllers**



# Easy, easier, easiest!

The N-Series is a series of panel mount batch controllers. It comes with a full numerical keypad, which adds to its already high level of simplicity and user-friendliness: clear menu structure, simple DIN panel mounting enclosure and easy ticket printing. With a unique and crystal clear LCD display, it provides multiple batch control data at a glance, including a graphical indication of the batch process and the relay status. The bright backlight is standard, ensuring perfect readings day and night. The new Fluidwell N-Series takes batch controlling to a new level.

# **Advantages**

- Save time and cost with the easy to operate numerical keypad.
- Your crew is in control with our highly praised "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Key information at a glance as the display simultaneously shows actual value, preset value, batch process indication, switch point indication and measuring units.
- Easy installation with the rugged aluminum DIN-size panel mount enclosure with only four inches depth clearance for smaller and low cost panels.

# **D-Series: DIN Panel mount Inidicators**



# Robust and water tight!

The D-Series is available as DIN panel mount indicator, transmitter, controller and monitoring system for flow, level, pressure and temperature measurement applications in industrial environments. It is the robust alternative for your existing, not waterproof, panel meters. The unique, robust IP66, IP67 (Type4X) front enclosure makes it the perfect fit for industrial panel mount applications where working environments are often cleaned with powerful water jets.

## **Advantages**

- Your crew is in control with our highly praised "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Resistant to harsh weather conditions (rain, snow, salty atmospheres, temperatures between -40°C/-40°F and +80°C/+178°F) without use of expensive protective cabinets.
- Unique, robust IP66, IP67 (Type4X) front enclosure made of aluminum, able to withstand total immersion and even powerful water jets!
- Only a few inches depth clearance for smaller, low cost panels and panel doors.



# F-Series: Robust field mount Indicators



# **Robust and user-friendly!**

The F-Series is a robust range of field mount indicators, controllers and monitoring systems for flow, level, pressure and temperature measurement in industrial environments. It is so rugged, you can even stand on it!

Once familiar with an F-Series product, you can program ALL models in ALL series without a manual: "know one, know them all". The F-Series is your first and best choice for field mount indicators in safe and hazardous area applications. Especially in harsh weather conditions like rain, snow, salty atmospheres and temperatures between

-40°C up to +80°C (-40°F up to +176°F).

# **Advantages**

- Robust aluminum or stainless steel 316L field enclosure (IP67 / NEMA Type4X). It is so rugged, a truck can even stand on it!
- Intrinsically Safe available with ATEX, IECEX, FM and CSA approvals for gas and dust applications.
- Your crew is in control with our highly praised "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Suitable for a wide range of applications with diverse mounting possibilities: walls, pipes, panels or directly onto outdoor sensors!
- Resistant to harsh weather conditions (rain, snow, salty atmospheres, temperatures between -40°C/-40°F and +80°C/+178°F) without use of expensive protective cabinets.

# **E-Series: Explosion proof Totalizers**



# **Explosion proof to the max!**

Fluidwell brings the first explosion-proof flow rate indicator / totalizer to the market that saves you time, money and hassle. Our E-Series flow computers are completely designed to deliver accurate measurement while withstanding the harshest conditions and bringing you ease of use. With touch screen control, opening covers is history, saving you the time and trouble of processing work permits or even (partial) plant shutdown. This unequalled flow master delivers results, fast and easy.

# **Advantages**

- Save time and gain flexibility with the easy-to-operate through glass keypad: no need to remove the front cover anymore!
- Your crew is in control with our "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Key information at a glance as the display shows flow rate, total, measuring units and a flow rate indicating speedometer.
- Key information at a glance as the display shows flow rate, total, accumulated total, daily total, previous day total, measuring units and a flow rate indicating speedometer.

Fluidwell by

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