**Features**

- Displays actual pressure and measuring unit.
- Very large 26mm (1”) digits.
- Piegraph indication: ten segments.
- Number of digits for pressure: 5½.
- Selectable on-screen engineering units: mBar - Bar - PSI.
- Operational temperature -40°C up to +80°C (-40°F up to 176°F).
- Very compact design for panel mount, wall mount or field mount applications.
- Auto backup of all settings.
- Rugged aluminum field mount enclosure IP67/NEMA4X.
- Intrinsically Safe - ATEX, IECEx and CSA approval for gas and dust applications.
- Explosion/flame proof II 2 GD EEx d IIB T5.
- LED backlight option.
- Loop or battery powered, 8 - 24V AC/DC or 115 - 230V AC power supply.
- Sensor supply 8.2 / 12 / 24V DC.

**Signal input**

**Pressure**

- (0)4 - 20mA.
- 0 - 10V DC.

**Applications**

- Applications where a basic pressure measurement display is required without pressure monitoring. More sophisticated models: F053, F151 and F153.
**General information**

**Introduction**
The F050 is a straightforward pressure indicator. The measuring unit to be displayed is simply selected through an alfa-numerical configuration menu. No adhesive labels have to be put on the outside of the enclosure: a weather proof and user friendly solution!
The configuration of the Span, off-set and number of decimals is done through software functions, without any sensitive dip-switches or trimmers. A wide selection of options further enhance this model’s capabilities, including Intrinsically Safe for hazardous area applications.

**Display**
The display has very large 26mm (1”) digits which displays the pressure and measuring unit. As the F050 has been designed for field mounted applications, a smart display update function has been incorporated. Related to the lower temperature, the update frequency of the LCD is tuned automatically to achieve a readable display even at -40°C / -40°F.

**Backlight**
For those applications where readability during day and night is an issue, a bi-color backlight is available. The background color green or amber and the intensity can be adjusted from the keyboard. The display is a transflective type, which means that a high contrast reading is guaranteed in full sunlight as well as during the night. This backlight option is also available Intrinsically Safe.

**Configuration**
All configuration settings are accessed via a simple operator menu which can be pass-code protected. Each setting is clearly indicated with an alphanumerical description, therefore avoiding confusing abbreviations. All settings are safely stored in EEPROM memory in the event of sudden power failure.

**Signal input**
The F050 does accept (0)4 - 20mA and 0 - 10V input signals from any type of pressure measurement device. Also a 4 - 20mA input loop powered model is available.

---

**Power supply**
Several power supply options are available to power the F050 and sensor. A battery powered version with a long life lithium battery which will last up to five years. A 4-20mA input loop powered version is available as well. A real sensor supply is offered with the 24V AC/DC or 115-230V AC power supply option.

**Hazardous area**
For hazardous area applications, this model has been ATEX, IECEx and CSA certified Intrinsically Safe for gas and dust applications, with an allowed operational temperature of -40°C to +70°C (-40°F to +158°F). FM certification is expected to be available in 2009. A flame proof enclosure with ATEX certification offers the rating Ex II 2 GD EEx d IIB T5.

**Enclosures**
Various types of enclosures can be selected, all ATEX, IECEx and CSA approved. As standard the F050 is supplied in an GRP panel mount enclosure, which can be converted to an IP67 / NEMA 4X GRP field mount enclosure by the addition of a back case. Most popular is our aluminum field mount enclosure with IP67 / NEMA 4X rating. Both European or U.S. cable gland entry threads are available.

---

**Overview application F050**

![Pressure input diagram](image-url)
Dimensions enclosures
Aluminum & GRP panel mount enclosure

Aluminum & GRP field / wall mount enclosures

Terminal connections power supply
PB/PC - PD - PL - PX

Terminal connections power supply PF - PM

Aluminum

HA

HD

HM

HE

HN

HF

HO

HG

HP

HH

HT

HJ

HU

HK

HZ

Flat bottom, no holes available.

PB / PC: battery powered
(PX is also available: if an external supply is connected,
the battery supply will be switched off / on automatically.)

For analog input (type A): voltage as connected to terminal 5.

For analog input (type U): voltage as connected to terminal 5.

PL: input loop powered.
Typical wiring diagram F050-A-PB-(PX)

**Type PB: BATTERY POWERED**

- Backlight option: type ZB 20 - 30V DC (not used in this example)
- Power supply type PX: 8 - 30V DC (not used in this example)
- Pressure input type A: (0)4 - 20mA

Common ground: sensor is externally powered.

* Sensor supply voltage: Terminal 3: not available.

Typical wiring diagram F050-A-PX-ZB

**Type PX: BASIC 8 - 30V DC POWER SUPPLY (STANDARD)**

- Backlight option: type ZB 20 - 30V DC
- Power supply type PX: 8 - 30V DC
- Pressure input type A: (0)4 - 20mA

* Sensor supply voltage: Terminal 3: not available.

Typical wiring diagram F050-A-PL-ZB

**Type PL: INPUT LOOP POWERED**

- Backlight option: type ZB 20 - 30V DC
- Pressure input type A - PL: Input loop powered 4 - 20mA

* Sensor supply voltage: Terminal 3: not available.

Typical wiring diagram F050-A-PD-ZB

**Type PD: 16 - 30V DC POWER SUPPLY**

- Backlight option: type ZB 20 - 30V DC
- Sensor supply type PD: 16 - 30V DC
- Pressure input type A: (0)4 - 20mA

* Sensor supply voltage: Terminal 3: not available. Terminal 6 with type PD: voltage as connected to terminal 5 (internally linked).
**Typical wiring diagram F050-A-PF-ZB**

**TERMINAL CONNECTORS**

**F0 - series**

<table>
<thead>
<tr>
<th>Type PF:</th>
<th>24V AC / DC POWER SUPPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backlight option: type ZB</td>
<td>Internally powered</td>
</tr>
<tr>
<td>Pressur input type A:</td>
<td>(0.4 - 20mA)</td>
</tr>
</tbody>
</table>

* Sensor supply voltage: Terminal 7: 8.2 / 12 / 24V DC.

**Typical wiring diagram F050-A-PF-ZB**

**TERMINAL CONNECTORS**

**F0 - series**

<table>
<thead>
<tr>
<th>Type PF:</th>
<th>24V AC / DC POWER SUPPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backlight option: type ZB</td>
<td>Internally powered</td>
</tr>
<tr>
<td>Pressur input type A:</td>
<td>(0.4 - 20mA)</td>
</tr>
</tbody>
</table>

* Sensor supply voltage: Terminal 7: 8.2 / 12 / 24V DC.

**Typical wiring diagram F050-A-PM-ZB**

**TERMINAL CONNECTORS**

**F0 - series**

<table>
<thead>
<tr>
<th>Type PM:</th>
<th>115 - 230V AC POWER SUPPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backlight option: type ZB</td>
<td>Internally powered</td>
</tr>
<tr>
<td>Pressur input type A:</td>
<td>(0.4 - 20mA)</td>
</tr>
</tbody>
</table>

* Sensor supply voltage: Terminal 7: 8.2 / 12 / 24V DC.
Hazardous area applications
The F050-XI has been certified according ATEX and IECEx by KEMA and according CSA c-us for use in Intrinsically Safe applications with an ambient temperature of -40°C to +70°C (-40°F to +158°F).
- The ATEX markings for gas and dust applications are:
  - II 1 G Ex ia IIC T4
  - II 1 D Ex iaD 20 IP 65/67 T 100 °C.
- The IECEx markings for gas and dust applications are: Ga Ex ia IIC T4 and Ex iaD 20 IP 65/67 T100 °C.
- The CSA c-us markings are: Class I/II/III, Division 1, Groups A, B, C, D, E, F, G, Temperature class T4 and Class I, Zone 0, AEx ia IIC T4.
- FM approval is expected to become available in 2009.
It is allowed to connect up to three I.S. power supplies to power the unit, sensor and backlight. The F050-PD-XI offers the input voltage to power an analog sensor.

An ATEX approved flame proof enclosure with rating II 2 GD Ex d IIB T5 is available as well. Please contact your supplier for further details.

Certificate of conformity KEMA 05ATEX1168 X
- IECEx KEM 08.0006X • CSA.08.2059461 X

Configuration example IIA - IIB and IIC - F050-A-PX-XI-ZB - Battery powered unit

<table>
<thead>
<tr>
<th>TERMINAL CONNECTORS</th>
<th>Hazardous area</th>
<th>Safe area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply backlight</td>
<td>+ Uo = max. 30V</td>
<td>Power supply</td>
</tr>
<tr>
<td>Common ground</td>
<td>+ Io = max. 200mA</td>
<td>For example MTL502S</td>
</tr>
<tr>
<td></td>
<td>+ Po = max. 0,75W</td>
<td></td>
</tr>
<tr>
<td>Main supply</td>
<td>+ Uo = max. 30V</td>
<td>Power supply</td>
</tr>
<tr>
<td></td>
<td>+ Io = max. 200mA</td>
<td>For example MTL502S</td>
</tr>
<tr>
<td></td>
<td>+ Po = max. 1,2W</td>
<td></td>
</tr>
<tr>
<td>Common ground</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Circuit depends on</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Signal (x)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Common ground</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

I.S. pressure sensor - input type A: (0)4 - 20mA

Note: above values are safety values. Consult the technical specification for operational values.

* Sensor supply voltage for analog pressure sensor type A / U: not available in this example.
Please note: type PX may be used in combination with the battery (type PC). PX will power the unit; the battery will be disabled automatically till power is disconnected.
**Configuration example IIA - IIB and IIC - F050-A-PD-XI-ZB - Power supply 16 - 30V DC**

**TERMINAL CONNECTORS**

**F0 - series**

- **HAZARDOUS AREA**
  - Backlight option: type ZB
  - Power supply type PD: 16 - 30V DC
  - I.S. pressure sensor - input type A: - (0)4 - 20mA

- **SAFE AREA**
  - + Uo = max. 30V
  - + Io = max. 200mA
  - - Pu = max. 0.75W
  - + Uo = max. 30V
  - + Io = max. 200mA
  - - Pu = max. 1.2W

Note: above values are safety values. Consult the technical specification for operational values.

* Sensor supply voltage for analog pressure sensor type A / U: Terminal 6: as input voltage terminal 5 (internally linked).
* Please note: type PD may be used in combination with the battery (type PC). PD will power the unit; the battery will be disabled automatically till power is disconnected.

---

**Configuration example IIA - IIB and IIC - F050-A-PL-XI-ZB - Input loop powered**

**TERMINAL CONNECTORS**

**F0 - series**

- **HAZARDOUS AREA**
  - Backlight option: type ZB
  - Power supply type PD: 16 - 30V DC
  - I.S. pressure sensor - input type A: - (0)4 - 20mA

- **SAFE AREA**
  - + Uo = max. 30V
  - + Io = max. 200mA
  - - Pu = max. 0.75W
  - + Uo = max. 30V
  - + Io = max. 93mA
  - - Pu = max. 0.92W

Note: above values are safety values. Consult the technical specification for operational values.

Sensor supply is not available: unit is input loop powered (type PL).
Please note: type PL may be used in combination with the battery (type PC). PL will power the unit; the battery will be disabled automatically till power is disconnected.
### Technical specification

#### Display

**Type**: High intensity reflective numeric and alphanumeric LCD, UV-resistant.

**Dimensions**: 90 x 40mm (3.5" x 1.6").

**Digits**: 5½ very large 26mm (1") digits. Various symbols and measuring units.

**Piegraph**: Ten segments - related to the input signal.

**Refresh rate**: User definable: 8 times/sec. - 30 secs - off.

**Option ZB**: Transreflective LCD with bi-color LED-backlight; green / amber. Intensity and color selected through the keyboard. Good readings in full sunlight and darkness. Also available Intrinsically Safe.

#### Operating temperature

**Standard unit**: -40°C to +80°C (-40°F to +178°F).

**Intrinsically Safe**: -40°C to +70°C (-40°F to +158°F).

#### Power requirements

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB</td>
<td>Long life Lithium battery - life-time depends upon settings and configuration - up to 5 years.</td>
</tr>
<tr>
<td>PC</td>
<td>Intrinsically Safe long life lithium battery - life-time depends upon settings and configuration - up to 5 years.</td>
</tr>
<tr>
<td>PD</td>
<td>16 - 30V DC. Power consumption max. 1 Watt.</td>
</tr>
<tr>
<td>PF</td>
<td>24V AC / DC ± 10%. Power consumption max. 15 Watt.</td>
</tr>
<tr>
<td>PL</td>
<td>Input loop powered from sensor signal 4 - 20mA (type A).</td>
</tr>
<tr>
<td>PM</td>
<td>115 - 230V AC ± 10%. Power consumption max. 15 Watt.</td>
</tr>
</tbody>
</table>

**Note PB/PC/PM**: Not available Intrinsically Safe.

**Note PF/PM**: The total consumption of the sensor and backlight type ZB may not exceed 400mA @ 24V DC.

**Note**: For Intrinsically Safe applications, consult the safety values in the certificate.

#### Sensor excitation

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB/PC/PX</td>
<td>Not available.</td>
</tr>
<tr>
<td>PD</td>
<td>The sensor supply voltage will be according to power supply voltage (as connected to terminal 5).</td>
</tr>
<tr>
<td>PF / PM</td>
<td>8.2 / 12 / 24V DC - max. 400mA @ 24V DC.</td>
</tr>
</tbody>
</table>

#### Terminal connections

**Type**: Removable plug-in terminal strip.

**Wire**: max. 1.5mm² and 2.5mm².

#### Data protection

**Type**: EEPROM backup of all settings. Data retention at least 10 years.

**Pass-code**: Configuration settings can be pass-code protected.

### Casing

#### General

**Window**: Polycarbonate window.

**Sealing**: Silicone.

**Control keys**: Three industrial micro-switch keys. UV-resistant silicone keypad.

#### Aluminum wall / field mount enclosures

**General**: Die-cast aluminum wall/fi eld mount enclosure IP67 / NEMA 4X with 2-component UV-resistant coating.

**Dimensions**: 130 x 120 x 75mm (5.1" x 4.7" x 2.95") - W x H x D.

**Weight**: 1100 gr.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA</td>
<td>Cable entry: 2 x PG9 and 1 x M20.</td>
</tr>
<tr>
<td>HM</td>
<td>Cable entry: 2 x M16 and 1 x M20.</td>
</tr>
<tr>
<td>HN</td>
<td>Cable entry: 1 x M20.</td>
</tr>
<tr>
<td>HP</td>
<td>Cable entry: 6 x M12.</td>
</tr>
<tr>
<td>HT</td>
<td>Cable entry: 1 x 1/2&quot; NPT.</td>
</tr>
<tr>
<td>HU</td>
<td>Cable entry: 3 x 1/2&quot; NPT.</td>
</tr>
<tr>
<td>HZ</td>
<td>Cable entry: no holes.</td>
</tr>
</tbody>
</table>

#### GRP wall / field mount enclosures

**General**: GRP wall/fi eld mount enclosure IP67 / NEMA 4X, UV-resistant and flame retardant.

**Dimensions**: 130 x 120 x 75mm (5.1" x 4.7" x 2.95") - W x H x D.

**Weight**: 600 gr.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD</td>
<td>Cable entry: no holes.</td>
</tr>
<tr>
<td>HE</td>
<td>Cable entry: 2 x Ø 16mm and 1 x Ø 20mm.</td>
</tr>
<tr>
<td>HF</td>
<td>Cable entry: 1 x Ø 22mm (7/8&quot;).</td>
</tr>
<tr>
<td>HG</td>
<td>Cable entry: 2 x Ø 20mm.</td>
</tr>
<tr>
<td>HH</td>
<td>Cable entry: 6 x Ø 12mm.</td>
</tr>
<tr>
<td>HJ</td>
<td>Cable entry: 3 x Ø 22mm (7/8&quot;).</td>
</tr>
<tr>
<td>HK</td>
<td>Flat bottom, cable entry: no holes.</td>
</tr>
</tbody>
</table>

#### Panel mount enclosures

**Dimensions**: 130 x 120 x 60mm (5.1" x 4.7" x 2.3") - W x H x D.

**Panel cut-out**: 115 x 98mm (4.53" x 3.86") L x H.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HB</td>
<td>Die-cast aluminum panel mount enclosure IP65 / NEMA 4.</td>
</tr>
<tr>
<td>HC</td>
<td>GRP panel mount enclosure IP65 / NEMA 4, UV-resistant and flame retardant.</td>
</tr>
</tbody>
</table>

**Weight**: 450 gr.

#### ABS wall / field mount enclosures

**General**: Silicone free ABS wall/field mount enclosure IP65 with EPDM and PE sealings. UV-resistat polyester keypad (old HD enclosure).

**Dimensions**: 130 x 114 x 71mm (5.1" x 4.5" x 2.8") - W x H x D.

**Weight**: 450 gr.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS</td>
<td>Cable entry: no holes.</td>
</tr>
</tbody>
</table>
Intrinsically Safe

ATEX certification II 1 G Ex ia IIC T4.
IECEx certificate Ex iaD 20 IP 65 / 67 T 100 °C.
CSA c-us Intrinsically Safe for Class I/II/III, Div. 1, Groups A, B, C, D, E, F, G, Temp. class T4 and Class I, Zone 0, AEx ia IIC T4.
Ambient -40°C to +70°C / -40° to +158°F.

Explosion proof
ATEX certification II 2 GD EEx d IIB T5.
Type XF Dimensions of enclosure: 300 x 250 x 200mm (11.8” x 9.9” x 7.9”) L x H x D.
Weight Appr. 15kg.

Environment

Signal input
Pressure sensor
Type A (0)4 - 20mA. Analog input signal can be scaled to any desired range within 0 - 20mA.
Type U 0 - 10V DC. Analog input signal can be scaled to any desired range within 0 - 10V DC.
Accuracy Resolution: 16 bit. Error < 0.01mA / ± 0.05% FS. Low level cut-off programmable.
Span 0.00001 / 199,999 with variable decimal position.
Offset -99,999 / +999,999 units.
Update time Four times per second.
Voltage drop Type A: max. 2V DC @ 20mA.
Voltage drop Type A - PL (loop powered): max. 2.6V DC @ 20mA.
Load impedance Type U: 3kΩ.
Relationship Linear and square root calculation.
Note For signal type A and U: external power to sensor is required; e.g. type PD.

Operational
Operator functions
Displayed • Actual pressure.
functions • Measuring unit.

Pressure
Digits 5½ digits.
Units mbar, bar, PSI, no-unit.
Decimals 0 - 1 - 2 - 3 - 4 or 5.

Display example - 90 x 40mm (3.5” x 1.6”)

Accessories
Mounting accessories
ACF02 Stainless steel wall mounting kit.
ACF05 Stainless steel pipe mounting kit (worm gear clamps not included).
ACF06 Two stainless steel worm gear clamps Ø 44 - 56mm.
ACF07 Two stainless steel worm gear clamps Ø 58 - 75mm.
ACF08 Two stainless steel worm gear clamps Ø 77 - 95mm.
ACF09 Two stainless steel worm gear clamps Ø 106 - 138mm.
ACF10 Customized Grevopal tagplates for ACF02 and ACF05, including stainless steel screws.
Dimension: 95mm x 12.5mm (3.75” x 0.50”).

Cable gland accessories
ACF20 For HA enclosure, includes O-rings.
ACF25 For HE enclosure, includes locknuts and O-rings.
ACF26 For HF enclosure, includes locknuts and O-rings.
ACF27 For HG enclosure, includes locknuts and O-rings.
ACF28 For HH enclosure, includes locknuts and O-rings.
ACF29 For HJ enclosure, includes locknuts and O-rings.
ACF32 For HM enclosure, includes O-rings.
ACF33 For HN enclosure, includes O-rings.
ACF34 For HO enclosure, includes O-rings.
ACF35 For HP enclosure, includes O-rings.
ACF36 For HU enclosure, includes O-rings.

Blind plug accessories
ACF50 For HA enclosure, includes O-rings.
ACF55 For HE enclosure, includes locknuts and O-rings.
ACF56 For HF enclosure, includes locknuts and O-rings.
ACF57 For HG enclosure, includes locknuts and O-rings.
ACF58 For HH enclosure, includes locknuts and O-rings.
ACF59 For HJ enclosure, includes locknuts and O-rings.
ACF62 For HM enclosure, includes O-rings.
ACF63 For HN enclosure, includes O-rings.
ACF64 For HO enclosure, includes O-rings.
ACF65 For HP enclosure, includes O-rings.
ACF69 For HT enclosure, includes O-rings.
ACF70 For HU enclosure, includes O-rings.

Intrinsically Safe isolators accessories
ACG01 MTL5011B - One channel pulse or switch output transfer from hazardous area to safe area, including power supply.
ACG02 MTL5025 - One channel power supply from safe area to hazardous area (e.g. to power the unit with PD or to power a switching or analog device in hazardous area).
ACG03 MTL5042 - One channel 4 - 20mA repeater from hazardous area to safe area, including power supply.
ACG04 MTL5051 - Bi-direction serial-data-isolator (for Modbus communiation).
ACG05 MTL5018 - Two channel pulse or switch output transfer from hazardous area to safe area, including power supply.
ACG06 MTL5012 - One channel pulse or switch output transfer from hazardous area to safe area, including power supply.
ACG07 MTL5045 - One channel isolated driver bringing 4 - 20mA from safe area to hazardous area, including power supply.
## Ordering information

**Standard configuration:** F050-A-HC-PX-XX-ZX.

<table>
<thead>
<tr>
<th>Ordering information:</th>
<th>F050</th>
<th>-</th>
<th>-H-</th>
<th>-P-</th>
<th>-X-</th>
<th>-Z-</th>
</tr>
</thead>
</table>

### Pressure sensor input signal

- **A**️️ (0) 4 - 20mA input.
- **U**️️ 0 - 10V DC input.

### Panel mount enclosures - IP65 / NEMA4

- **HB**️️ Aluminum enclosure.
- **HC**️️ GRP enclosure.

### GRP field / wall mount enclosures - IP67 / NEMA4X

- **HD**️️ Cable entry: no holes.
- **HE**️️ Cable entry: 2 x Ø 16mm & 1 x Ø 20mm.
- **HF**️️ Cable entry: 1 x Ø 22mm (7/8”).
- **HG**️️ Cable entry: 2 x Ø 20mm.
- **HH**️️ Cable entry: 6 x Ø 12mm.
- **HJ**️️ Cable entry: 3 x Ø 22mm (7/8”).
- **HK**️️ Flat bottom, cable entry: no holes.

### Aluminum field / wall mount enclosures - IP67 / NEMA4X

- **HA**️️ Cable entry: 2 x PG9 + 1 x M20.
- **HM**️️ Cable entry: 2 x M16 + 1 x M20.
- **HN**️️ Cable entry: 1 x M20.
- **HO**️️ Cable entry: 2 x M20.
- **HP**️️ Cable entry: 6 x M12.
- **HT**️️ Cable entry: 1 x 1/2”NPT.
- **HU**️️ Cable entry: 3 x 1/2”NPT.
- **HZ**️️ Cable entry: no holes.

### ABS field / wall mount enclosures

- **HS**️️ Silicone free ABS field enclosure IP65 – Cable entry: no holes (old HD enclosure).

### Power supply

- **PB**️️ Lithium battery powered.
- **PC**️️ Lithium battery powered - Intrinsically Safe.
- **PD**️️ 16 - 30V DC + sensor supply.
- **PF**️️ 24V AC / DC + sensor supply.
- **PL**️️ Input loop powered from sensor signal 4 - 20mA (type A).
- **PM**️️ 115 - 230V AC + sensor supply.
- **PX**️️ Basic power supply 8 - 30V DC (no sensor supply).

### Hazardous area

- **XI**️️ Intrinsically Safe.
- **XF**️️ EExd enclosure - 3 keys.
- **XX**️️ Safe area only.

### Other options

- **ZB**️️ Backlight.
- **ZX**️️ No options.

The bold marked text contains the standard configuration.

️️ Available Intrinsically Safe.