The DP–4000 is a high-performance differential pressure transmitter with a compact and robust Stainless steel electronics housing. The calibration / programming can be done very easy without test pressure by using the Unique One Touch programming button together with the Graphic display with backlight. The multilingual graphic display can indicate a number of chosen engineering units including the process temperature as well as the mA output in a bargraph. Damping times can be adjusted and a 4–20 mA current simulation can be performed. For flow measurement a square root function is built-in with adjustable cut off point. The output is 4–20 mA including HART® protocol (HART® 7.0). ATEX II1G Ex ia IIC T6 Ga and IECEx approvals are available.

HART® is a registered trademark of the HART Communication Foundation.
Series DP-4000

Specifications
Accuracy: 0.075% (option: 0.065%)
Ranges: 0-10 mbar to 0 – 20 bar
Turn down: up to 100:1
Adjustment: by One pushbutton and local display, without testpressure
Output: 4-20 mA + HART® Protocol (version 5.0 and 7.0)
Supply: 12 – 36 Vdc
Electronics housing: AISI 304 (Option: AISI 316)
Protection: IP66/67 (option IP68)
Process temperature: -20°C to 80°C (option: 100°C)
Ambiant temperature: -20°C to 70°C
Material wetted parts: AISI 316L (option: Hastelloy C)
Material diaphragm: AISI 316L (option: Hastelloy C, Tantalum or Gold plated)
Material sensor gasket: Viton/FKM (standard), PTFE or NBR
Process connection: 1/4” - 18 NPT female
Option: ½” NPTf (by oval flanges)

Adjustable points
- P101 Zero adjustment (ZERO / 4 mA)
- P102 Span adjustment(SPAN / 20 mA)
- P103 Cancel mounting position effect
- P104 Adjustment pressure unit
- P105 Output 4-20 mA* or 20-4 mA
- P106 Damping adjustment (0 - 25 sec.)
- P107 Language: English*, Dutch, German, French, Russian or Polish
- P108 Safety adjustment, Alarm and backlight
- P109 Read out on display:
  - Current, pressure unit, temp. or %.
- P110 Current simulation (4-20 mA)
- P111 Linearisation (various tankshapes)
- P112 Burst mode (with option HART®)
- P113 Instrument information
- P114 Flow / Square root
  *= Factory setting

Graphic display with bargraph and backlight
Multilingual: English, Dutch, German, French, Spanish, Russian and Polish

Unique ‘One Touch Programming Button’
The series DP-4000 is carried out with a unique control button.
This ‘single button’ can be used for all programming / calibration functions.

With unique One Touch Programming Button

360° Revolving display
Separate electronics housing:
Series DP-4000 is also available in a separate version.
Type: **DP-4000**-Cable(...m)-range-...
Always specify the cable length, range etc.

**DP-Level Measurement in closed tanks:**
For DP level measurement in closed pressurized tanks a DP-4000 with separate diaphragm seals is available.
**A tank linearization can be programmed very easy.**
The standard tank shapes are:
- Horizontal tank with flat end or parabolic end
- Vertical tank with a spherical bottom or conical bottom

*For level measurement in open (non-pressurized) tanks please use other Klay Level transmitters, i.e. Series 8000-SAN (0.2%), series 2000-SAN (0.1%) or series 4000-SAN (0.075%).
## Ordering codes Series DP-4000

### Series DP-4000

#### Ordering code: DP-4000-

<table>
<thead>
<tr>
<th>ACCURACY CLASS:</th>
<th>0.075 % (standard)</th>
<th>0.065 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANGE:</td>
<td>TD</td>
<td>MIN SPAN:</td>
</tr>
<tr>
<td>60 mbar</td>
<td>6:1</td>
<td>10 mbar</td>
</tr>
<tr>
<td>400 mbar</td>
<td>40:1</td>
<td>10 mbar</td>
</tr>
<tr>
<td>2.0 bar</td>
<td>100:1</td>
<td>20 mbar</td>
</tr>
<tr>
<td>30 bar</td>
<td>100:1</td>
<td>0.2 bar</td>
</tr>
</tbody>
</table>

#### Static Pressure (Max.):

- 160 bar (standard) | S
- 250 bar (only for range B, C and D) | H

#### Diaphragm Material / Body Material:

- AISI 316 L (standard) | S
- Hastelloy C 276 | S
- Tantalum | H
- Gold plated on SST 316L | S

#### Fill Fluid Diaphragm:

- Silicone oil (standard) | S
- Fluorinated oil | F

#### Gasket (Process / Diaphragm):

- Viton (FKM) (standard) | V
- Teflon (PTFE) | T
- NBR | N

#### Process Connection / Oval Flange Connection / Venting:

- 1/4 - 18 NPT female | 7/16-20 UNF | Incl. vent valves at flange end | S

#### Electrical Connection / Cable Entry:

- M20 x 1.5 female thread (standard) | S
- 1/2"NPT female thread | N
- PG 11 | P

#### Approvals:

- None | S
- Intrinsically safe ATEX | Ex
- I1G Ex ia IIC T6 Ga and IECEx | Ex

#### Options:

- Transparent cover, display functions as local indicator | I
- Degreasing (Silicone oil) | D
- Oxygen cleaning (Fluorinated oil) FKM gasket | Ox
- Electronics housing material AISI 316 (Standard is AISI 304) | G9

#### Ordercode standard Model: DP-4000-S-C-S-S-S-V-S-S-S

### ACCESSORIES:

- Mounting bracket (AISI 304)  
- Oval Flanges (AISI 316L) to get 1/2" NPT process connection.  
- Bolts / nuts in AISI 316 (Standard is AISI 304)  
- 3 way manifold (AISI 316L) Type: M3G  
- 5 way manifold (AISI 316L) Type: M5G  

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We reserve the right to technical modifications without prior notice.