

Display | Control | Switch

DELTA-line product family for differential pressure



Smart in sensing

Fields of application

The differential pressure measuring instruments of the DELTA-line series are used for the monitoring and control of filtration, flow and level.



- Heat transfer oil plants
- Marine boilers, pressure vessels, bilge-water collection
- Drinking and cooling-water treatment plants
- Pressure-boosting stations
- Heating technology
- Fire-extinguishing systems
- Water and wastewater treatment
- Machine building and plant construction



Key buying factors

Robust



Versatile



Safe



Robust: Developed for harsh environments

The robust aluminium case and the shatterproof window protect the instrument from mechanical effects. Thus, a long service life is guaranteed, even under harsh ambient conditions.



Versatile: Two displays in one instrument

Alongside the differential pressure display, the instrument also features an integrated working pressure indication. Thus, an additional measurement and sealing point is avoided and further effort and cost is saved. Thanks to the large mechanical differential pressure display with 100 mm diameter, a user-friendly and precise readability of the measured value is ensured – even from a distance away.



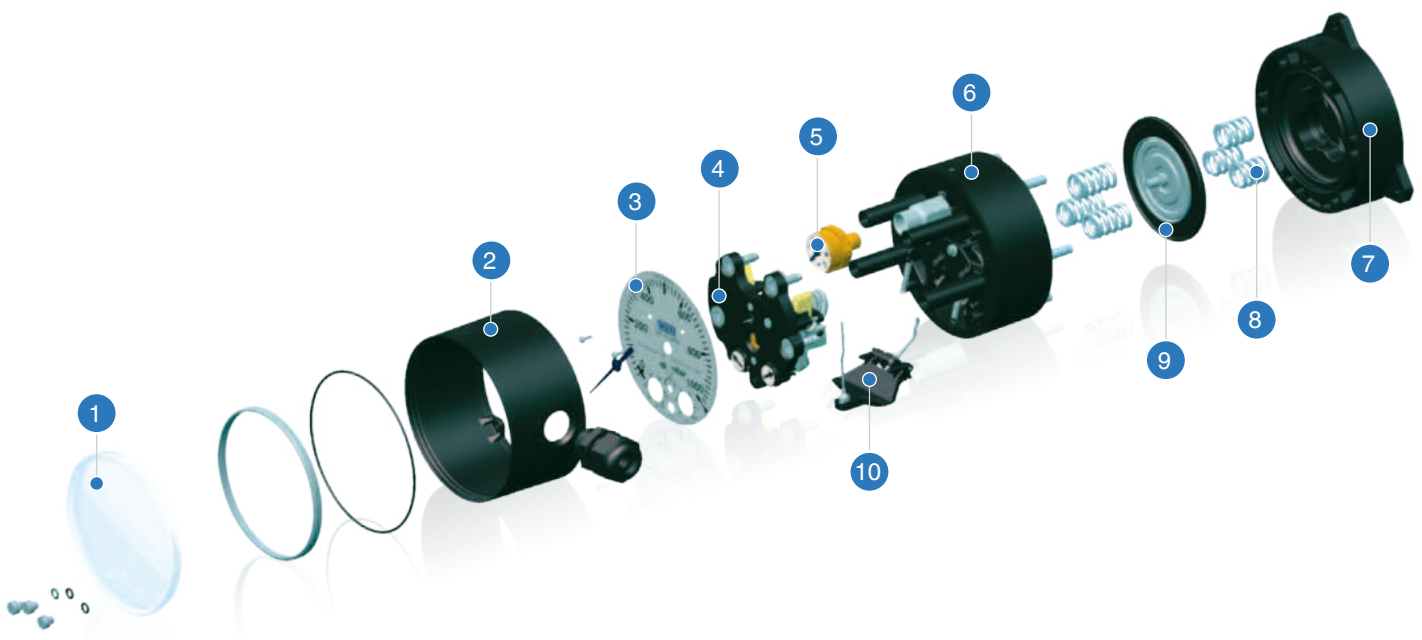
Safe: Approvals and certificates

For measuring and switching instruments which must ensure the safety of technical plant, excellent quality is a must. This is certified for the differential pressure gauge with switching function, DELTA-comb with component testing, model DPGS40TA, through several approvals and certificates. SIL 2 certificate, flow monitor with safety function in accordance with VdTÜV code of practice “Flow 100” and DNV GL, confirms the reliability of this instrument type.

Instrument construction

Robustness, versatility and safety are also reflected in the construction. Individual components, perfectly matched to each other, make for the highest quality.

Example: DELTA-comb



- 1 Shatterproof window with plug screws for zero point correction and switch point adjustment
- 2 Case ring
- 3 Dial
- 4 Movement holder with movement and microswitch
- 5 Working pressure indication
- 6 Upper part of measuring cell

- 7 Lower part of measuring cell
- 8 Compression springs
- 9 Separating diaphragm
- 10 Linkage (transmits the displacement of the diaphragm to the movement)

Window with setting functionality

Via the plug screws on the window, the switch points can be set easily and conveniently. Also, in order to correct the zero point, the window does not need to be removed. In this way the instrument fulfils the high requirements for IP65 ingress protection.

Versatility

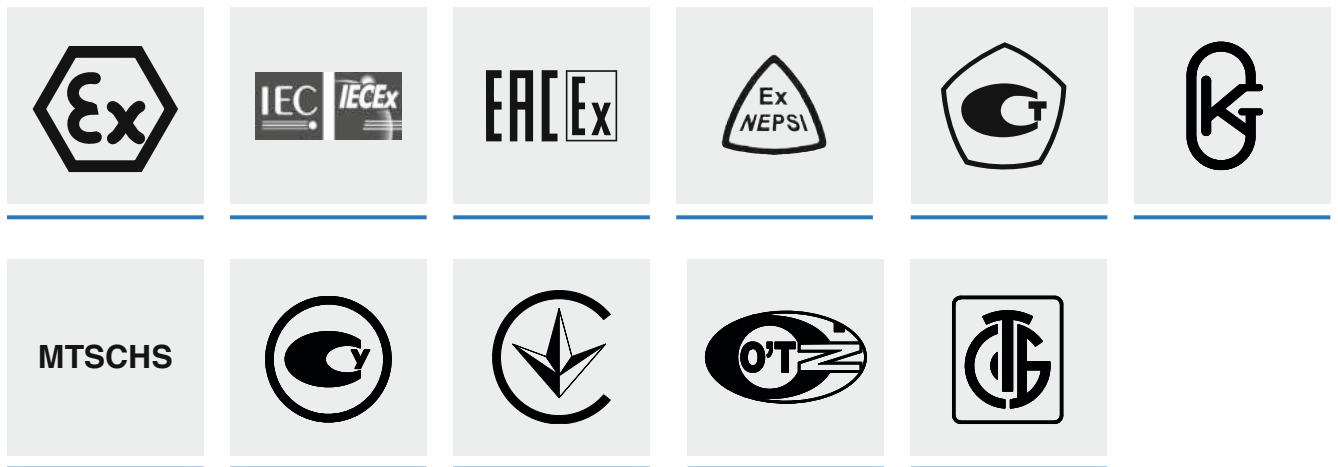
In the standard version, the measuring cell is manufactured out of aluminium. Optionally, a stainless steel variant is available, which enables operation in corrosive or aggressive media and is thus also suitable for special thermal oils.

Worldwide approvals

High-quality components are essential for safe and reliable production processes and technical plants. They are a precondition for highly efficient processes, helping to avoid danger to people, environment and property. Rigorous testing of the instruments used, by national and international certification bodies, results in reliability. The DELTA-line instruments offer a wide range of approvals and certificates for the various different markets and applications.



Approvals



Additionally for model DPGS40TA



Differential pressure gauge with microswitches and integrated working pressure indication

DELTA-plus
DPG40

Display



- Simultaneous display of differential pressure and working pressure

■ Data sheet PM 07.20

Differential pressure gauge with output signal and integrable working pressure indication

DELTA-trans
DPGT40

Control



- Simultaneous display of differential pressure and working pressure
- An electronic angle encoder (non-contact, and therefore completely free from wear and friction) determines the position of the pointer shaft.
- From this, the electrical output signal proportional to the pressure, e.g. 4 ... 20 mA, is produced, which then acts to transmit the signal to the control room.

■ Data sheet PV 17.19

Differential pressure switch

DELTA-switch
DPS40

Switch



- Switching function in response to a specific differential pressure
- Switch points settable from the front: Window with plug screws for switch point adjustment

■ Data sheet PV 27.21

Differential pressure gauge with microswitches and integrated working pressure indication

DELTA-comb
DPGS40

Switch
and
display



- Simultaneous display of differential pressure and working pressure
- Switching function in response to a specific differential pressure
- Switch points settable from the front: Window with plug screws for zero point correction and switch point adjustment

■ Data sheet PV 27.20

Differential pressure gauge with microswitches and integrated working pressure indication

DELTA-comb with component testing
DPGS40TA

Switch
and
display



- Simultaneous display of differential pressure and working pressure
- Switching function in response to a specific differential pressure

■ Data sheet PV 27.22

DELTA-line product family

Specifications

Nominal size of differential pressure display:
100 mm

Differential pressure measuring range:
0 ... 0.25 to 0 ... 10 bar

Working pressure:
Max. 0 ... 25 bar

Process connection:
2 x G 1/4 female, lower mount, in-line

Centre distance:
26 mm

Overpressure safety:
On both sides max. 25 bar

Accuracy class:
Up to 1.6 %

Ingress protection:
IP65

Material of measuring cell (wetted):
Black, aluminium or stainless steel

Nominal size of working pressure indication:
22 mm



Option



- Plug screws on the window for switch point and zero point adjustment, settable from the front
- Protection against unauthorised access by lead sealing possible

Accessories



Valve manifold for Delta Line
4-valve in copper alloy or stainless steel



Connection adapters for pressure measuring instruments
Model 910.14



Panel mounting flange



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