

## Deltatop DN61S



More information and current pricing:

[www.de.endress.com/DN61S](http://www.de.endress.com/DN61S)

### Benefits:

- Customized or application-specific flowmeter systems based on the dp method for special applications, such as: Low pressure loss, high abrasion resistance, calibrated meter runs, extended nominal diameter range, controlled pressure reduction
- Optimized for minimum pressure loss, maximum accuracy or maximum turndown
- Measuring range of the Deltabar differential pressure transmitter adjusted on delivery
- Application of international standards (e.g. ISO 5167)
- Robust design and no moving parts

### Specs at a glance

- **Max. measurement error** typically < 1,5% of calculated volume or mass acc. ISO5167 without calibration. Uncertainty of primary element excluding uncertainty of density or compensation.
- **Measuring range** 15 ... 120'000 m<sup>3</sup>/h 75 ... 600'000 kg/h at 10bar/230°C
- **Medium temperature range** Compact version: -200°C ... 200°C -328°F ... 392°F Remote version: -200°C ... 1000°C -328°F ... 1832°F
- **Max. process pressure** PN2,5 ... 400 Cl.150 ... 2500

**Field of application:** The Deltatop DN61S is part of the universal differential pressure flowmeter systems with primary elements as Venturi tubes, nozzles, orifice plates and Deltabar dp transmitters. As with Venturi tubes, a wide variety of nozzles are available. These nozzles can be standardized or developed in line with manufacturers specifications. Practically all versions can be provided by Endress+Hauser. A nozzle consists of a convergent section with a rounded profile and a cylindrical throat.

### Features and specifications

## Liquids

### Measuring principle

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#### Product headline

Calculated volume or mass flow measurement. dp primary element (nozzle). Venturi nozzle with outlet cone.

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#### Sensor features

Internationally standardized ISO5167-3.

Meter runs.

Weld-In or flanged versions.

Special materials.

Compact or remote design.

Optimizable for minimized pressure loss, improved uncertainty or maximized Turndown.

Deltabar S/M differential pressure transmitter.

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#### Nominal diameter range

DN 50...600

2" ... 24"

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#### Max. measurement error

typically < 1,5% of calculated volume or mass acc. ISO5167 without calibration.

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#### Measuring range

0.5 ... 25'000m<sup>3</sup>/h

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#### Max. process pressure

PN2,5 ... 400

Cl.150 ... 2500

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#### Medium temperature range

Compact version:

-200°C ... 200°C

-328°F ... 392°F

Remote version:

-200°C ... 1000°C

-328°F ... 1832°F

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## Liquids

### Degree of protection

Transmitter (Deltabar):  
IP67  
NEMA6P

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### Display/Operation

Transmitter (Deltabar):  
4-line display  
3 push buttons  
Quick setup  
HistoROM

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### Outputs

Transmitter (Deltabar):  
4 ... 20 mA

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### Digital communication

Transmitter (Deltabar):  
HART  
PROFIBUS PA  
FOUNDATION Fieldbus

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### Hazardous area approvals

Transmitter (Deltabar):  
ATEX  
FM  
CSA  
IEC  
TIIS  
NEPSI

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## Gas

### Measuring principle

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### Product headline

Calculated volume or mass flow measurement. dp primary element (nozzle). Venturi nozzle with outlet cone.

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## Gas

**Sensor features**

Internationally standardized ISO5167-3.

Meter runs.

Weld-In or flanged versions.

Special materials.

Compact or remote design.

Optimizable for minimized pressure loss, improved uncertainty or maximized Turndown.

Deltabar S/M differential pressure transmitter.

**Nominal diameter range**

DN 50...600

2" ... 24"

**Max. measurement error**

typically < 1,5% of calculated volume or mass acc. ISO5167 without calibration.

Uncertainty of primary element excluding uncertainty of density or compensation.

**Measuring range**

15 ... 120'000m<sup>3</sup>/h

**Max. process pressure**

PN2,5 ... 400

Cl.150 ... 2500

**Medium temperature range**

Compact version:

-200°C ... 200°C

-328°F ... 392°F

Remote version:

-200°C ... 1000°C

-328°F ... 1832°F

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**Gas****Degree of protection**

Transmitter (Deltabar):  
IP67  
NEMA6P

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**Display/Operation**

Transmitter (Deltabar):  
4-line display  
3 push buttons  
Quick setup  
HistoROM

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**Outputs**

Transmitter (Deltabar):  
4 ... 20 mA

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**Digital communication**

Transmitter (Deltabar):  
HART  
PROFIBUS PA  
FOUNDATION Fieldbus

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**Hazardous area approvals**

Transmitter (Deltabar):  
ATEX  
FM  
CSA  
IEC  
TIIS  
NEPSI

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**Steam****Measuring principle**

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**Product headline**

Calculated volume or mass flow measurement. dp primary element (nozzle). Venturi nozzle with outlet cone.

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**Steam****Sensor features**

Internationally standardized ISO5167-3.

Meter runs.

Weld-In or flanged versions.

Special materials.

Compact or remote design.

Optimizable for minimized pressure loss, improved uncertainty or maximized Turndown.

Deltabar S/M differential pressure transmitter.

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**Nominal diameter range**

DN 50...600

2" ... 24"

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**Max. measurement error**

typically < 1,5% of calculated volume or mass acc. ISO5167 without calibration.

Uncertainty of primary element excluding uncertainty of density or compensation.

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**Measuring range**

15 ... 120'000 m<sup>3</sup>/h

75 ... 600'000 kg/h at 10bar/230°C

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**Max. process pressure**

PN2,5 ... 400

Cl.150 ... 2500

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**Medium temperature range**

Compact version:

-200°C ... 200°C

-328°F ... 392°F

Remote version:

-200°C ... 1000°C

-328°F ... 1832°F

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## Steam

**Degree of protection**

Transmitter (Deltabar):

IP67

NEMA6P

**Display/Operation**

Transmitter (Deltabar):

4-line display

3 push buttons

Quick setup

HistoROM

**Outputs**

Transmitter (Deltabar):

4 ... 20 mA

**Digital communication**

Transmitter (Deltabar):

HART

PROFIBUS PA

FOUNDATION Fieldbus

**Hazardous area approvals**

Transmitter (Deltabar):

ATEX

FM

CSA

IEC

TIIS

NEPSI

More information [www.de.endress.com/DN61S](http://www.de.endress.com/DN61S)