



Senzor presiune diferentia/ Differential Pressure Sensor 1.6 bar diff.

CS 1.6 bar diff.

Instructiuni de operare Operating Instructions

V2.00/RO-EN/00684710 40105000T91Z000K053

Instructiuni de siguranta / Safety notes



ATENȚIE!

Senzorul de presiune diferentia CS 1.6 bar diff. este utilizat pentru masurarea presiunii diferentiale in lichide si gaze. Utilizarea necorespunzatoare a senzorului poate fi periculoasa. Senzorul trebuie utilizat numai de catre personal autorizat si calificat profesional, care respecta aceste instructiuni si cerintele legislatiei in vigoare (in functie de aplicatie) pentru instalarea, conectarea si utilizarea senzorului. Senzorul nu indeplineste cerintele pentru "Componenta cu functii de siguranta" conform Directivei 97/23 / CE privind Echipamente sub presiune (valabila pana la 18.07.2016), 2014/68 / UE (valabila de la 19.07.2016). In cazul aparitiei unor probleme la punerea in functiune, va rugam sa ne contactati:



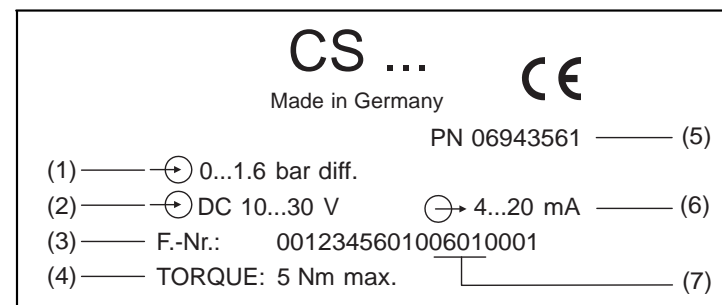
CAUTION!

The differential pressure sensor CS 1.6 bar diff. is used for measuring differential pressure in liquids and gases. Improper application of the device can be dangerous. The device must only be used by authorized, professionally qualified personnel who follow these instructions and the relevant legal requirements and standards (depending on the application) for installing, connecting and operating the instrument. It does not meet the requirements for a "Component with safety functions" as per the Pressure Equipment Directive 97/23/EC (valid until 18.07.2016), 2014/68/EU (valid from 19.07.2016). Should any problems arise during startup, please contact us:

Scurta descriere / Brief description

Senzorul de presiune diferentia masoara presiunea in medii lichide si gazoase. Diferenta dintre cele doua presiuni este transformata intr-un semnal analogic de iesire. Senzorul piezorezistiv de siliciu este introdus intr-o carcasa din otel inoxidabil. / This differential pressure sensor measures the pressure in liquid and gaseous media. The difference between the two pressures is converted into an analog output signal. The piezoresistive silicon sensor is built into a stainless steel housing.

Eticheta produs / Nameplate



- (1) Domeniu masurare / Measuring range
- (2) Tensiune alimentare / Power supply
- (3) Serie senzor / Serial number
- (4) Cuplu pentru conectare la proces / Torque for process connection
- (5) Cod de comanda / Part no.
- (6) Semnal de iesire / Output signal
- (7) Data fabricatiei / Date of manufacture 0601 = 2006/01 (an/saptamana)/(year/week)

Date tehnice / Technical data

Cu exceptia cazului in care sunt alte specificatii, toate valorile procentuale urmatoare se refera la intervalul de masurare. / Unless further specified, all the following percentage values refer to the measurement span.

Conditii de referinta / Reference conditions
Conform / as per DIN 16086 si / and DIN EN 60770

Domenii de masurare / Measuring ranges
Domeniu masurare / Measuring range: 0 ... 1,6 bar
Presiune maxima / max. system pressure¹: 10 bar

¹ pentru presiune simultana aplicata la ambele intrari + si - / for simultaneous pressure on both + and - sides

Suprasarcina max.la ambele intrari / max. overload on both sides¹: 15 bar
Suprasarcina max.la o intrare /max. single-sided overload
intrare +: 15 bar; intrare - /side: 10 bar
Presiune rupere / Bursting pressure: ≥ 60 bar
Eroare totala / Overall error²: ≤ 2,0 % din cap scala / of full scale
Stabilitate pe termen lung (anuala) / Long-term stability: ≤ 0,6 %

Iesire / Output

4 ... 20 mA 2 fire / two-wire
Sarcina/Burden ≤ (U_B-10 V) ÷ 0,02 A

Abatere valoare zero / Zero offset
≤ 0,3 %

Histerzis termic / Thermal hysteresis

(cu compensare / within the compensated range -15 ... +85 °C)
Pentru domeniu masurare / for measuring ranges <0,6 bar: ≤ ±1 %
Pentru domeniu masurare / for measuring ranges >0,6 bar: ≤ ±0,5 %

Raspuns semnal treapta / Step response

Pentru iesire in curent / for current output: ≤ 3 msec
Pentru iesire in tensiune / for voltage output: ≤ 10 msec

Tensiune alimentare / Voltage supply

DC 10 ... 30 V pentru iesire / for output 4 ... 20 mA

Tensiune nominala alimentare / Nominal voltage supply

DC 24 V

Temperatura operare / Operating temperature

Ambientala / Ambient: -20 ... +80 °C
Mediu masurat / Medium: -15 ... +100 °C
Pastrare / Storage: -50 ... +100 °C

Compatibilitate electromagnetica (EMV)/ Electromagnetical compatibility (EMC)

conform / as per EN 61326
Interferente emisii: Clasa B / Interference emission: Class B³
Imunitate la interferente: cerinte industriale / Interference immunity: to industrial requirements

Socuri mecanice / Mechanical shock

(conform / to DIN IEC 68-2-27): 100 g/1 ms

Clasa de protectie / Protection type

(conform / to EN 60529)
Cu conector circular / with round plug M12 × 1: IP67
Cu cablu fix / with fixed cable: IP67

Conexiune proces / Process connection

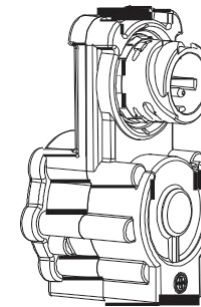
2 × G 1/8" Filet interior inclusiv cupla cu retinere pentru tub de 6 mm / Internal thread including plug-clutches for hoses of 6 mm

Conexiune electrica / Electrical connection

Conector circular M12 x 1 / Round plug M12 × 1

Pozitie nominala / Nominal position

Fara restrictie / unrestricted



Deviatiile de la pozitia nominala pot provoca erori pana la 2 mbar. / Deviations from the nominal operating position can cause an error of up to 2 mbar.

Greutate / Weight

Cu bride pentru fixare cca. 350 g / with fastening bracket approx. 350 g

² Eroarea totala include erorile de liniaritate, histerzis, reproductibilitate si abatere cu temperatura in domeniul -15 ... +85 °C. / The total error includes errors due to linearity, hysteresis, reproducibility and temperature drift over the range from -15 to +85 °C.

³ Produsul este destinat pentru utilizare in aplicatii industriale, gospodarii si intreprinderi mici. / The product is suitable for industrial use as well as for households and small businesses.

Optiuni pentru montare / Fastening options

- Bride de prindere, blocate cu 3 suruburi in gauri de fixare / fastening bracket, screwed on the three bore holes
- Linii de masurare / on measurement lines

Conexiune electrica / Electrical connection

| | | |
|--------------------------------------|---------------------------|-----|
| | | |
| Conector/ Round plug | | |
| Iesire curent/Current output | | |
| Tensiune alimentare / Voltage supply | DC 10 - 30 V ^a | 1 + |
| Iesire / Output (2 fire / two-wire) | 4 - 20 mA | 3 - |

^a Senzorul trebuie echipat cu un circuit electric conform cerintelor standardului EN 61010-1 „Circuite cu energie limitata”. / The device must be equipped with an electrical circuit that meets the requirements of EN 61010-1 with regard to "Limited-energy circuits".

Temperatura admisibila / Permissible temperature



ATENȚIE!

Mediul masurat nu trebuie sa inghete in interiorul senzorului de presiune diferentia!
Daca mediul masurat este apa si materialul carcasei este PBT, temperatura mediului din interiorul senzorului nu trebuie sa depaseasca +50°C! Pentru reducerea temperaturii, senzorul de presiune diferentia poate fi deconectat termic de la proces cu ajutorul unor cabluri.

CAUTION!

The medium being measured must **not** freeze inside the differential pressure sensor!
With water as the medium and PBT as the housing material, the temperature of the medium inside the device must not exceed +50 °C!
The differential pressure sensor can be thermally disconnected from the process by means of cables in order to reduce the temperature.

Mediu masurat / Process medium



ATENȚIE!

Utilizatorul trebuie sa verifice compatibilitatea cu mediul care urmeaza a fi masurat!

CAUTION!

The customer must test the compatibility with the medium being measured!

Montaj / Mounting



NOTA!

Impamantati brida de fixare! Etansati conexiunile la proces si la carcasa din plastic, dar protejati filetul!

NOTE!

Ground the mounting bracket! The process connections must seal tightly to the plastic housing but not the thread!



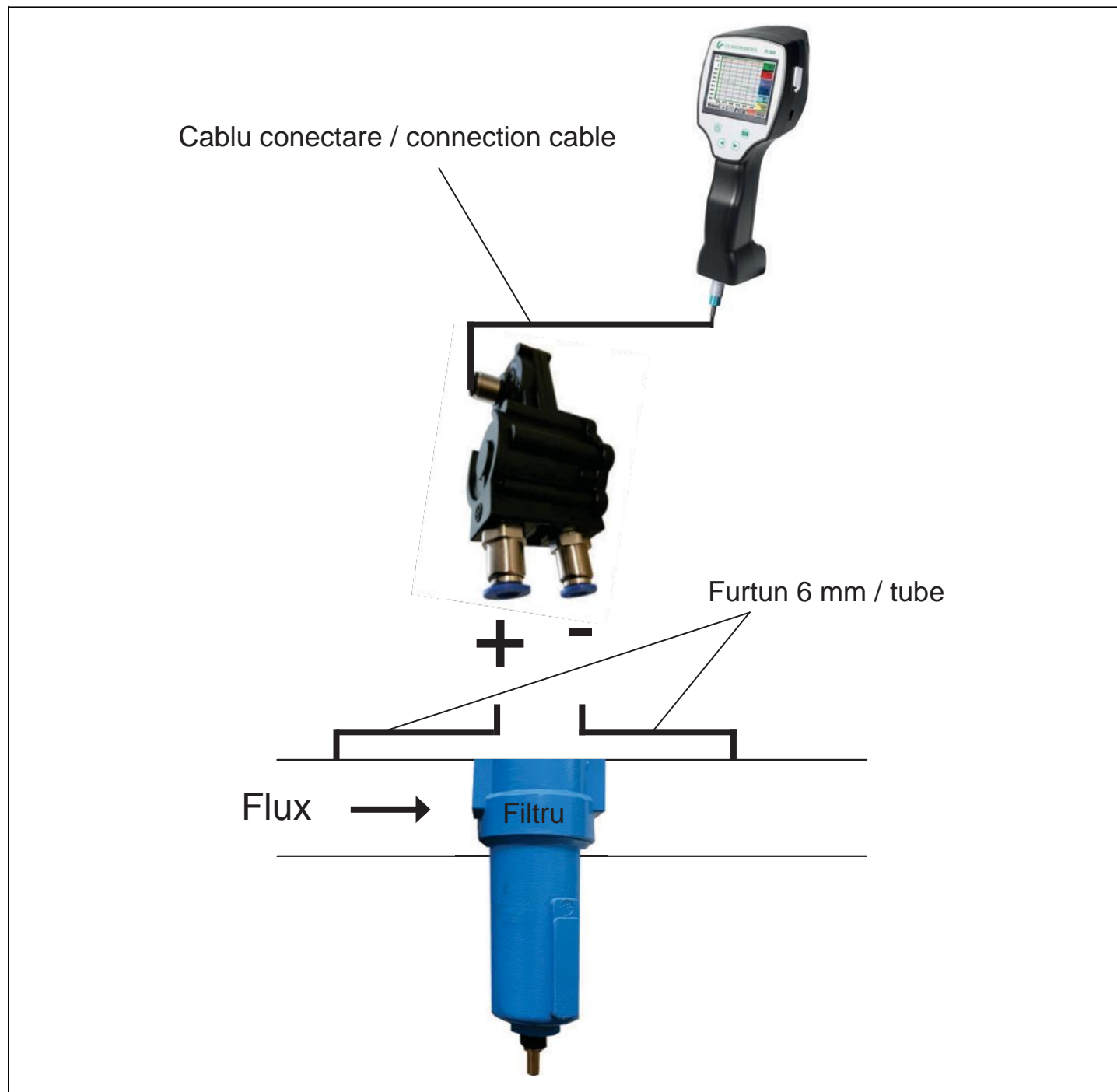
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Dimensiuni / Dimensions



Sablon pentru gaurire / Drilling template

