

Installation guide

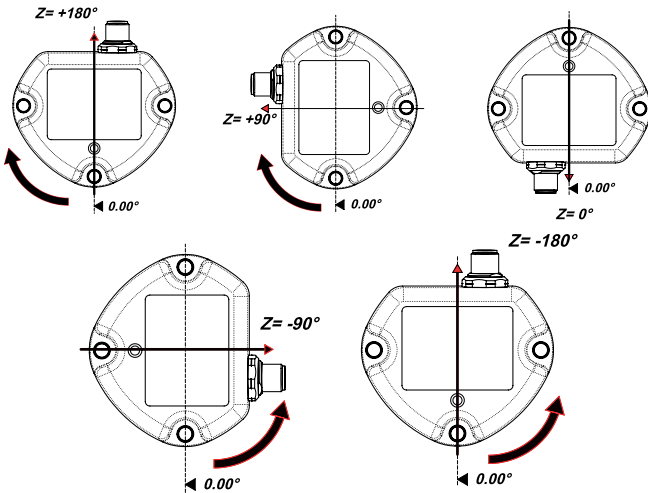
# Single/Dual inclination sensor DST X720

098R0006

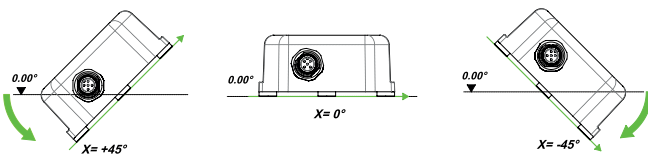
098R0006

**TILT DIRECTION**

**M12 VERSION - single axis Z**

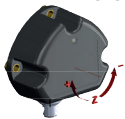


**CABLE VERSION - dual axis XY**

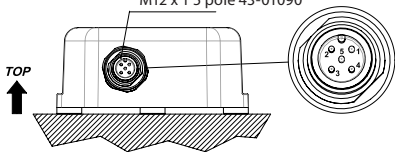


**ELECTRICAL CONNECTIONS**

**M12 VERSION - single axis Z**



CONEC connector  
M12 x 1 5 pole 43-01090



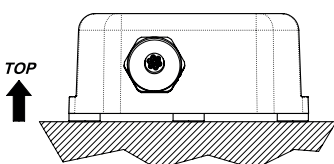
**CONNECTIONS**

1. + SUPPLY
2. OUTPUT Y
3. GROUND
4. OUTPUT X
5. n.c.

**CAN CONNECTIONS**

1. n.c.
2. + SUPPLY
3. GROUND.
4. CAN-H.
5. CAN-L

**CABLE VERSION - dual axis XY**



**CONNECTIONS**

- White: + SUPPLY
- Yellow: GROUND
- Grey: OUTPUT X
- Blue: OUTPUT Y
- Pink: n.c.
- Green: n.c.
- Brown: n.c.

**CAN CONNECTIONS**

- White: + SUPPLY
- Yellow: GROUND
- Grey: CAN-H
- Blue: CAN-L
- Pink: n.c.
- Green: n.c.
- Brown: n.c.

**DST X720**

GENERAL SINGLE/DUAL  
AXIS  
INCLINOMETER (XY/360°)

Danfoss A/S 6430 Nordborg Denmark  
www.danfoss.com



Mandatory use conical spring washer  
 M5 DIN 6796 A2 (3 pcs included)

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The installation of the devices illustrated in the manual must be carried out by qualified technicians in compliance with the laws and standards in force and in agreement with the instructions contained in the manual.

The system should be only used in accordance with the expected protection.

The sensor must be used in accordance with the environmental features and performance of the instrument.

**LOAD CONDITIONS**

- +0.5VDC...+4.5 VDC output (powered at 10...36VDC) and 0...10 VDC output (powered at +11...36 VDC): apply a load resistance > 100kΩ
- +0.5 VDC...+4.5 VDC output ( powered at +5 VDC) maximum allowed load resistance is >10 kΩ
- +4...20 mA output (powered at < +15..36 VDC) maximum allowed load resistance is 200Ω
- +4...20 mA output (powered at > +15..36 VDC) maximum allowed load resistance is 500Ω

**MOUNTING**



Mount the sensor using M5 screws in nonmagnetic stainless steel: eg AISI 316 or brass (not included).

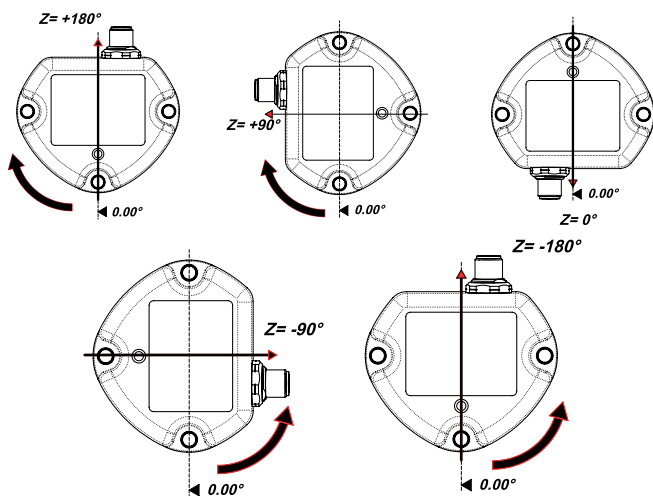
It is mandatory to use conical spring washer M5 DIN 6796 A2 - 3 pcs. (included).



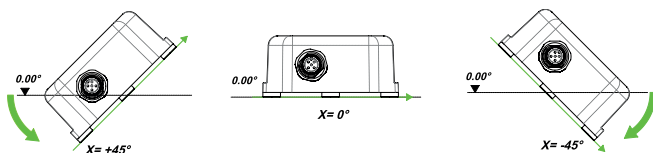
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## NEIGUNGSRICHTUNG

### VERSION M12 - einachsig Z

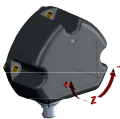


### VERSION KABEL AUSGABE - zweiachsig XY



## ELEKTRISCHE ANSCHÜSSE

### VERSION M12 - einachsig Z



STECKVERBINDER CONEC  
M12 x 15 polig 43-01090

#### ANSCHLÜSSE

1. + VERSORGUNG
2. AUSGANG Y
3. GND
4. AUSGANG X
5. n.c.

#### CAN ANSCHLÜSSE

1. n.c.
2. + VERSORGUNG
3. GND
4. CAN-H.
5. CAN-L

### VERSION KABEL AUSGABE - zweiachsig XY



#### ANSCHLÜSSE

- Weiss: + VERSORGUNG  
GELB: GND  
Grau: AUSGANG X  
Blau: AUSGANG Y  
Pink: n.c.  
Grün: n.c.  
Braun: n.c.

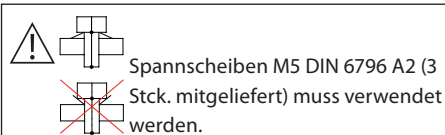
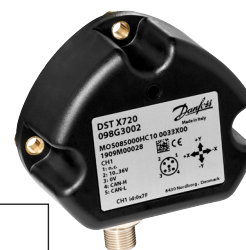
#### CAN ANSCHLÜSSE

- Weiss: + VERSORGUNG  
Yellow: GND  
Grau: CAN-X  
Blau: CAN-Y  
Pink: n.c.  
Grün: n.c.  
Braun: n.c.

## DST X720

NEIGUNGSMESSER  
GENERAL,  
EIN-/ZWEIACHSIG  
(XY/360°)

Danfoss A/S 6430 Nordborg Denmark  
www.danfoss.com



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## ! LASTBEDINGUNGEN

Ausgang +0,5VDC...+4,5VDC (Versorgung 10...36VDC) und Ausgang 0...10VDC (Versorgung +11...36VDC): empfohlener Lastwiderstand > 100 kOhm

Ausgang +0,5VDC...+4,5VDC Versorgung +5VDC: empfohlener Lastwiderstand > 10 kOhm

Ausgang +4...20 mA mit Versorgung < +15...36VDC: max. zulässiger Lastwiderstand 200 Ohm

Ausgang +4...20 mA mit Versorgung > +15...36VDC: max. zulässiger Lastwiderstand 500 Ohm

## MONTAGE

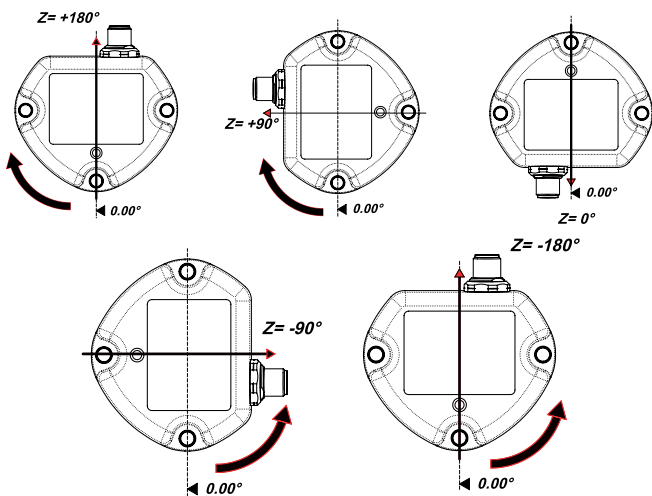
! Zum Befestigen des Sensors M5-Schrauben aus unmagnetischem Edelstahl: z.B. AISI 316 oder Messing verwenden (nicht enthalten).

Es müssen Spannscheiben für M5 DIN 6796 A2 (3 St.) verwendet werden.

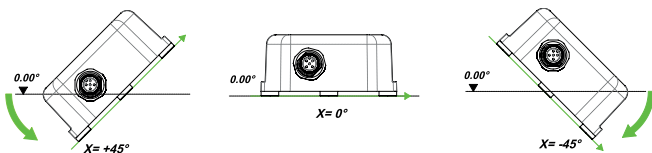
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- 2004/108/CE (EMC Directive)

## SENS DE D'INCLINAISON

### VERSION M12 - axe simple Z

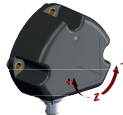


### VERSION AVEC CABLE - double axe XY

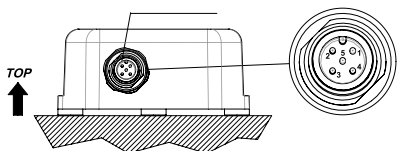


## CONNEXIONS ELECTRIQUES

### VERSION M12 - axe simple Z



Connecteur CONEC  
M12 x 15 pôle 43-01090



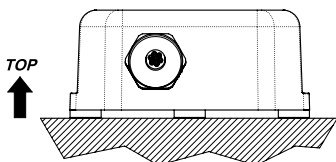
#### CONNEXIONS

1. + ALIMENTATION
2. SORTIE Y
3. MASSE
4. SORTIE X
5. n.c.

#### CAN CONNEXIONS

1. n.c.
2. + ALIMENTATION
3. MASSE.
4. CAN-H.
5. CAN-L

### VERSION AVEC CABLE - double axe XY



#### CONNEXIONS

- Blanc: + ALIMENTATION  
Jaune: MASSE  
Gris: SORTIE X  
Bleu: SORTIE Y  
Rose: n.c.  
Vert: n.c.  
Brun: n.c.

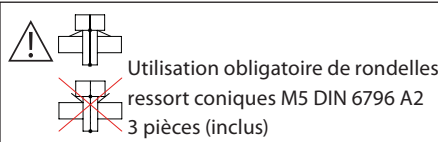
#### CAN CONNEXIONS

- Blanc: + ALIMENTATION  
Jaune: MASSE  
Gris: CAN-H  
Bleu: CAN-L  
Rose: n.c.  
Vert: n.c.  
Brun: n.c.

## DST X720

INCLINOMETRE GENERAL  
SIMPLE/DOUBLE AXE  
(XY/360°)

Danfoss A/S 6430 Nordborg Denmark  
www.danfoss.com



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## CONDITIONS DE CHARGE

Sorties +0.5Vcc...+4.5 Vcc avec alimentation +10...36Vcc et sortie +0..10Vcc avec alimentation

+11..36Vcc: résistance de charge recommandée > 100 kΩ

Sorties +0,5Vcc...+4,5Vcc avec alimentation +5Vcc: résistance de charge recommandée > 10 kΩ

Sorties +4...20mA avec alimentation <+15..36Vcc: la résistance de charge maximum admissible est de 200Ω

Sorties +4...20mA avec alimentation >+15..36Vcc: la résistance de charge maximum admissible est de 500kΩ

## MONTAGE



Installer le capteur en utilisant des vis M5 en acier inoxydable amagnétique (ex.: AISI 316 ou laiton).

Il est obligatoire d'utiliser des rondelles ressort coniques M5 DIN 6796 A2 - 3 pièces. (inclus)

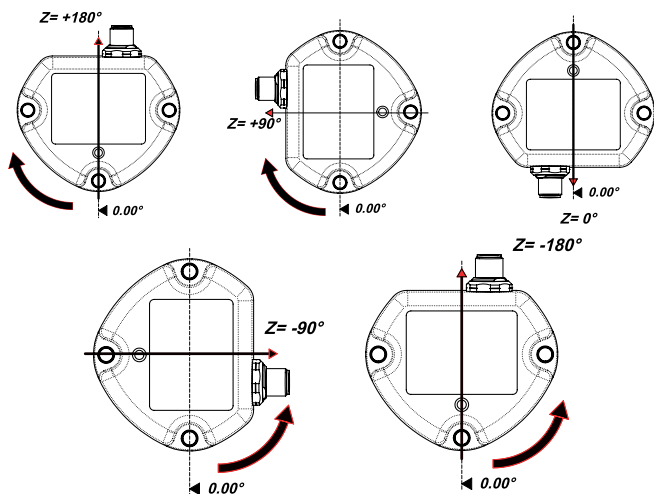


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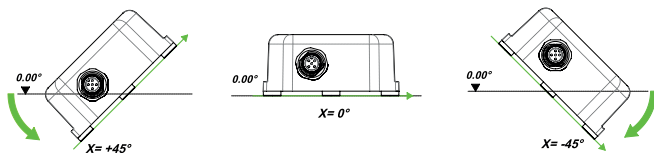
- 2004/108/CE (EMC Directive)

## SENSO DI INCLINAZIONE

### VERSIONE M12 - singolo asse Z



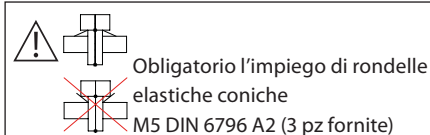
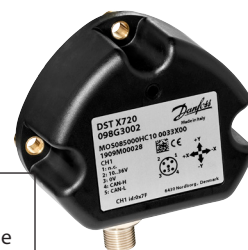
### VERSION CAVO - doppio asse XY



## DST X720

INCLINOMETRO GENERAL  
SINGOLO/DOPPIO ASSE  
(XY/360°)

Danfoss A/S 6430 Nordborg Denmark  
www.danfoss.com



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L'installazione del dispositivo illustrato nella guida deve essere effettuata da tecnici abilitati, seguendo le leggi e normative in vigore e in accordo con le istruzioni contenute nel presente manuale. Il sistema va usato esclusivamente in accordo al grado di protezione previsto. Il sensore deve essere utilizzato in accordo con le caratteristiche ambientale e alle prestazioni dello strumento.

## CONNESSIONI ELETTRICHE

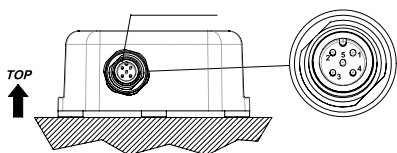
### VERSIONE M12 - singolo asse Z



Connettore CONEC  
M12 x 1 5 poli 43-01090

#### CONNESSIONI

1. + SUPPLY
2. OUTPUT Y
3. GROUND
4. OUTPUT X
5. n.c.



#### CAN CONNESSIONI

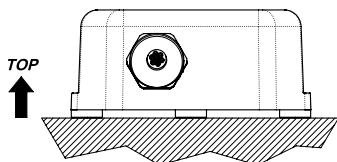
1. n.c.
2. + SUPPLY
3. GROUND.
4. CAN-H.
5. CAN-L

### VERSION CAVO - doppio asse XY



#### CONNESSIONI

- Bianco: + SUPPLY  
Giallo: GROUND  
Grigio: OUTPUT X  
Blu: OUTPUT Y  
Rosa: n.c.  
Verde: n.c.  
Marrone: n.c.



#### CAN CONNESSIONI

- Bianco: + SUPPLY  
Giallo: GROUND  
Grigio: CAN-H  
Blu: CAN-L  
Rosa: n.c.  
Verde: n.c.  
Marrone: n.c.

## CONDIZIONI DI CARICO

Uscite +0.5Vdc...+4.5 Vdc con alimentazione +10...36Vdc e uscita +0..10Vdc con alimentazione

+11..36Vdc: si raccomanda una resistenza di carico > 100 kΩ

Uscite +0.5Vdc...+4.5 Vdc con alimentazione +5 Vdc: si raccomanda una resistenza di carico > 10kΩ

Uscite +4...20 mA con alimentazione < + 15..36Vdc: la resistenza di carico massima ammissibile è 200Ω

Uscite +4...20 mA con alimentazione > + 15..36Vdc: la resistenza di carico massima ammissibile è 500Ω

## MONTAGGIO

Montare il sensore utilizzando viti M5 in acciaio inox amagnetico es: AISI 316 o ottone (non fornite).

Utilizzare rondelle elastiche coniche M5 DIN 6796 A2 - 3 pz. (fornite).

I prodotti Danfoss A/S riportanti la marcatura "CE" sono in accordo con le Direttive Comunitarie e con la relativa legislazione nazionale di recepimento:  
- 2004/108/CE (EMC Directive)