



# Danfoss DST X510 Rotary Sensor With Shaft Installation Guide

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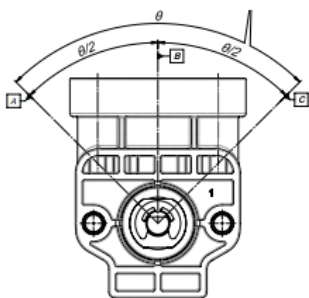
## Danfoss DST X510 Rotary Sensor With Shaft



ROTATION DIRECTION

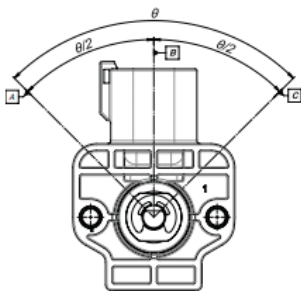
AMP VERSION

The output increases for versions CCW



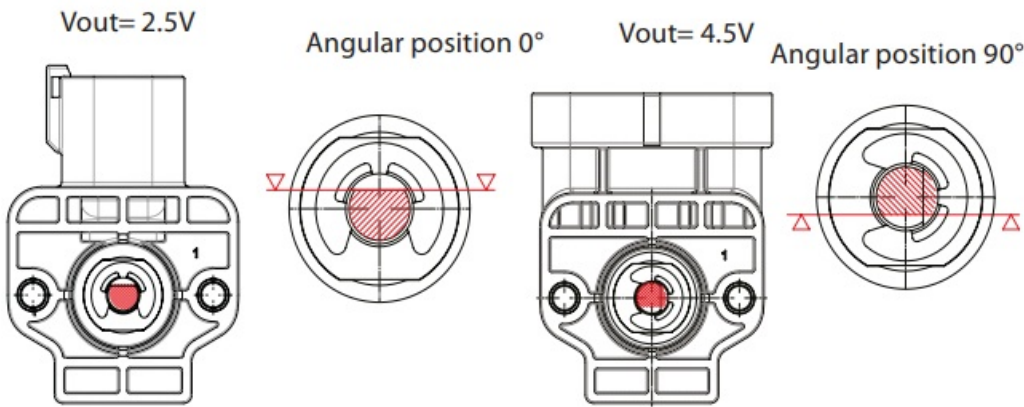
DEUTSCH VERSION

The output increases for versions CW



Ref	CW Output	CCW Output
A	0.5Vdc Output	4.5Vdc Output
B	Zero angular position of 0 °	Zero angular position of 0 °
C	4.5Vdc Output	0.5Vdc Output

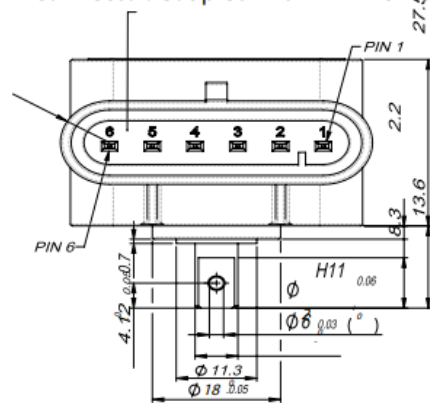
**Ex:** 098G1000  
SINGLE-  $\pm 90^\circ$ - supply 7 – 36 V – output 0.5..4.5V – clockwise CW



ELECTRICAL CONNECTIONS

AMP VERSION

AMP Superseal 6-pole 282108-1  
connector. Coupled with AMP 282090-1



## CONNECTIONS

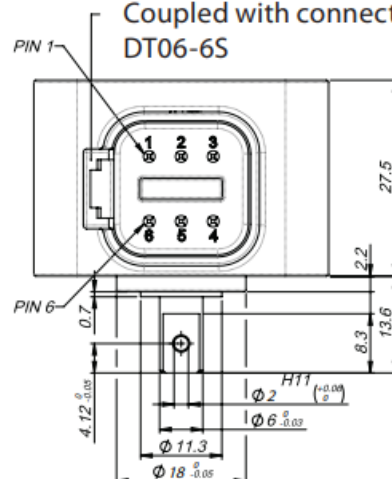
1. GROUND 1
2. + SUPPLY 1
3. OUTPUT 1
4. GROUND 2
5. + SUPPLY 2
6. OUTPUT 2

## CAN CONNECTIONS

1. OV (GND)
2. +Vs (+9 ... +36 Vdc)
3. NC
4. NC
5. CAN-L
6. CAN-H

## DEUTSCH VERSION

DEUTSCH 6 pole DT04-6P Connector  
Coupled with connector DEUTSCH  
DT06-6S



## CONNECTIONS

1. GROUND 1
2. + SUPPLY 1
3. OUTPUT 1
4. GROUND 2
5. + SUPPLY 2
6. OUTPUT 2

## CAN CONNECTIONS

1. OV (GND)
2. +Vs (+9 ... +36 Vdc)
3. NC
4. NC
5. CAN-L
6. CAN-H

To ensure the degree of protection IP68, the connector must be coupled with a DEUTSCH DT06-6S female connector.

## LOAD CONDITIONS

- **Output:** +0.5 Vdc...+4.5 Vdc with +5 Vdc power supply: apply load resistance >10 k $\Omega$
- **Output:** +0.5 VDC...+4.5 VDC with +5 VDC power supply: apply load resistance >10 k $\Omega$
- **Outputs:** +4...20 mA with < + 15..36Vdc power supply: maximum allowed load resistance is 200 $\Omega$  Outputs +4...20 mA with > + 15..36Vdc
- **power supply:** maximum allowed load resistance is 500 $\Omega$

Danfoss A/S, with the "CE" mark, is manufactured according to the Community Directives and the related

## National Legislation of conception

- 2011/65/EU Restriction of the use of certain hazardous substances (RoHS)
- 2014/30/EU Electromagnetic Compatibility (EMC)
- 2001/95/EC General product safety

## MOUNTING

- Mount the sensor using M4 screws in nonmagnetic stainless steel: eg AISI 316 or brass (not included).
- The maximum torque amounts to 2.5Nm.

## Frequently Asked Questions

**Q: What is the maximum torque for mounting the sensor?**

A: The maximum torque for mounting the sensor is 2.5Nm.

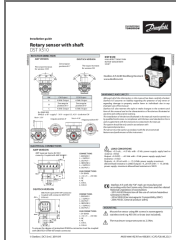
**Q: What is the output range of the sensor?**

A: The sensor has an output range from +0.5 Vdc to +4.5 Vdc.

**Q: How should I connect the sensor electrically?**

A: Follow the specified pin configurations for either the AMP Version or the DEUTSCH Version as mentioned in the user manual.

**Documents / Resources**



[Danfoss DST X510 Rotary Sensor With Shaft](#) [pdf] Installation Guide  
DST X510 Rotary Sensor With Shaft, DST X510, Rotary Sensor With Shaft, Sensor With Shaft,  
With Shaft

**References**

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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