Danfoss 73690900 High Accuracy Actuator User Guide

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Danfoss 73690900 High Accuracy Actuator

Product Specifications

- **Operating Guide**: IP54
- **DN Size**: 15 – 32
- **Calibration:** Manual
- **Control Signal:** BACnet MS/TP, Modbus RTU, 0-10V, 0-20mA
- **Power:** 24VAC/DC, 50/60 HZ
- **Force:** 90N
- **Stroke:** 7 mm
- **Speed:** 3-24s/mm

Product Usage Instructions

Calibration:
To manually calibrate, press the button until two LEDs are turned on and then released. Adjust settings using the DIP switch or the manual override wheel.

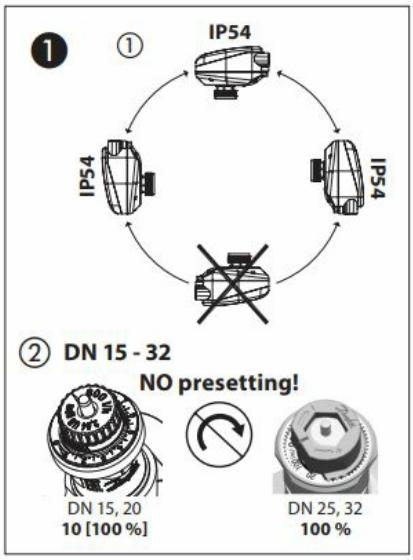
Connection:
Ensure a common ground is used for all devices on the same network. Connect power, control signals, and any additional cables as required.

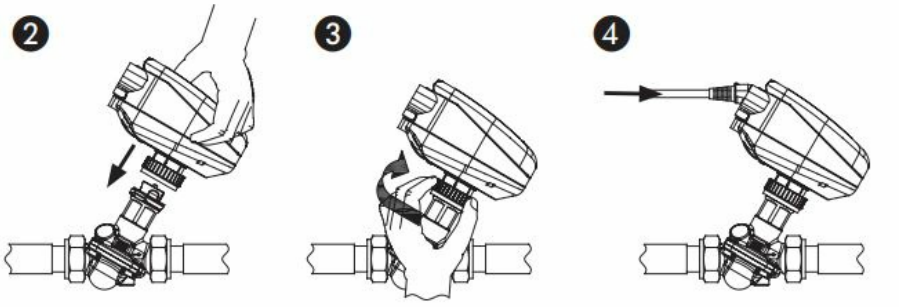
Firmware Update:
Validate and update firmware version before installation. Download the latest firmware from **www.novocon.com** under the Support files tab.

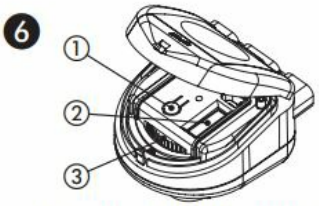
FAQ

- **How do I change the control signal?**
  You can change the control signal by adjusting the DIP switches. Refer to the manual for specific instructions on changing between BACnet MS/TP and Modbus RTU.
- **What safety precautions should I take during installation?**
  Ensure that assembly, start-up, and maintenance work are carried out by qualified personnel. Always switch off the power line before wiring the actuator to prevent injury or damage.

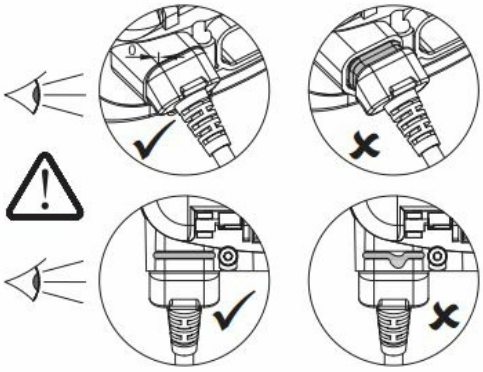
INSTALLATION INSTRUCTION

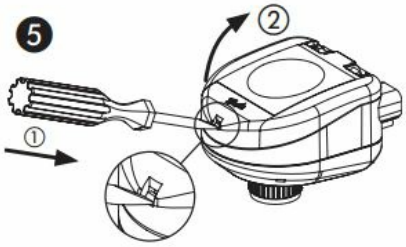






Manuel Calibration: Press button ① until two LED's are turned on, and then release again.
DIP switch: ②
Manual override: Adjust wheel ③





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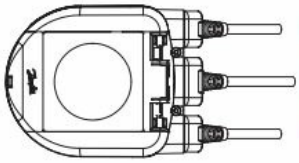
Common ground shall be used for all devices on the same network.



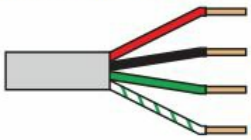
Digital port

Port for CO6 actuator or Energy cable, I/O cable, analog cable or voltage booster.

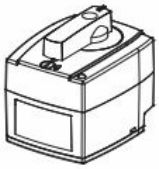
Digital port

WIRING CONFIGURATION

NovoCon® digital cable



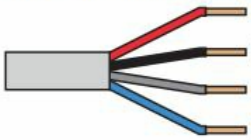
Red	Power
Black	Common ground for power and bus signal wire
Green	'+' non-inverting signal wire
White/green	'–' inverting signal wire



Actuator NovoCon® ChangeOver⁶

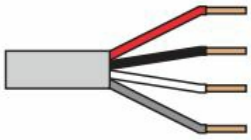
Actuator NovoCon® ChangeOver⁶ Energy

NovoCon® analog cable



Red	Power 24V
Black	GND
Grey	Analog input or Flow sensor
Blue	Analog input ground

Actuator NovoCon® ChangeOver⁶ Flexible

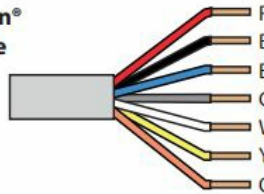


Red	Power 24V
Black	GND
White	CO6 Control signal
Grey	CO6 Feedback signal

NovoCon® Energy cable
- PT1000 surface sensors

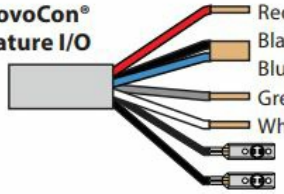
NovoCon® Energy cable
- PT1000 immersed sensors

NovoCon® I/O cable



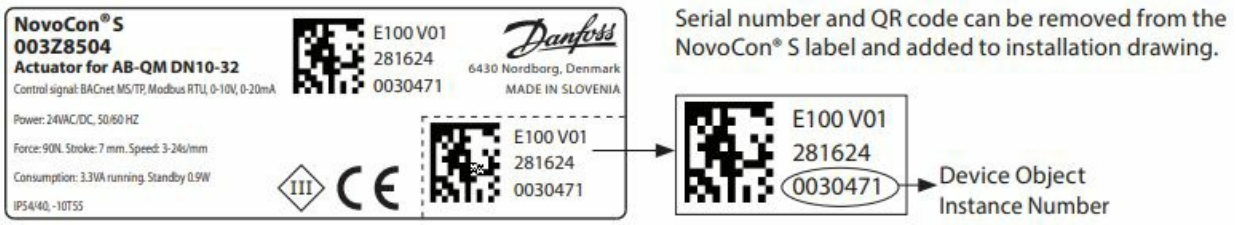
Red	Power 24V
Black	Power ground
Blue	Ground T1, T2, V/mA input & V output signal
Grey	V/mA input signal or Flow sensor
White	V output signal
Yellow	T1, resistance input or Flow sensor
Orange	T2, resistance input or Flow sensor

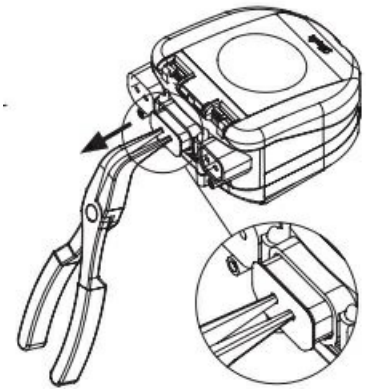
Cable NovoCon® Temperature I/O



Red	Power 24V (in/out)
Black	Power ground (in/out)
Blue	Ground T1, T2, V/mA input & V output signal
Grey	V/mA input signal or Flow sensor
White	V output signal
	T1
	T2

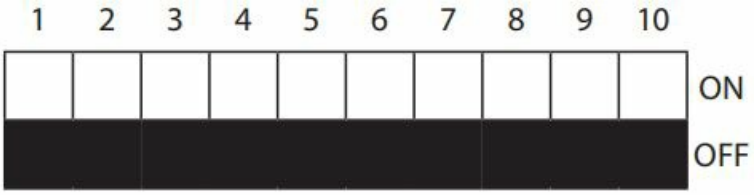
Serial number



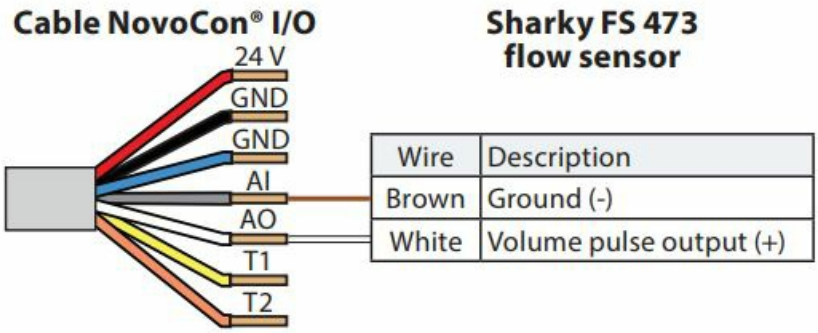


DIP Switch

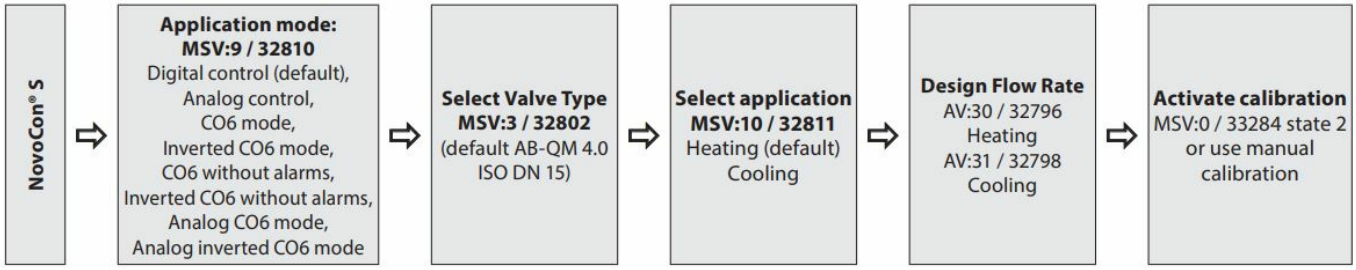
- DIP Switches 1 to 7 are used to assign the MAC address manually. The default MAC address assignment method is Auto MAC addressing for BACnet MS/TP and DIP Switches for Modbus RTU.
- For termination of the last unit on the field bus, turn DIP Switch 8 ON.
- Dip switch 9 is not used.
- Dip switch 10 is used to select between BACnet MS/TP (OFF=Default) and Modbus RTU (ON).
- When the protocol is changed on DIP Switch 10, a power cycle is required.



Optional step (connecting flow sensor)



Initial configuration



Safety Note

- To avoid injury and damage to persons and devices, it is absolutely necessary these instructions are carefully read and observed prior to assembly and commissioning.
- Necessary assembly, start-up, and maintenance work must be performed only by qualified, trained, and authorized personnel. Switch off the power line before wiring the actuator.
- If the NovoCon® S network is supplied with two or more AC power boosters, caution must be observed when disconnecting one of the transformers from the high-voltage power line. As the NovoCons are connected in a daisy chain, there may be high voltage on the primary side of the disconnected power supply. Disconnect always on both the primary and secondary sides of the transformer.
- Connect via safety isolating transformer.
- Galvanic separations shall be provided for segments crossing buildings.
- **Firmware update**
  - We recommend validating the firmware version before installation.
  - The latest firmware can be downloaded at www.novocon.com by selecting the tab: Support files.

The following information is provided with the product documentation or marked on the product:

- Purpose of control: Operating Control.
- Construction of control: Independently Mounted.
- Type 1 Action.
- Pollution Degree: 3.
- Impulse Voltage: 500 V.
- Type of movement: Linear.
- Mechanical and thermal ratings (ref. to Rating section for more details).
- The main power supply for the actuator and “Input control signal” shall be provided by the same SELV/Class 2 circuit.

ABOUT COMPANY

Any information, including, but not limited to information on the selection of the product, its application or use, product design, weight, dimensions, capacity, or any other technical data in product manu catalogsogss descriptions, advertisements, etc., and whether made available in writing, orally, electronically, online or via download, shall be considered ininformatieand is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogs, brochures,videoso,s and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes toth form, fit, or function of the product.
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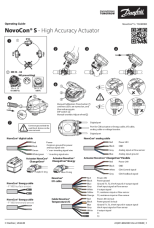
Documents / Resources

	Danfoss 73690900 High Accuracy Actuator [pdf] User Guide AQ251486498741en-010608, 73690900, E100 VX01X 281624 0030471, 73690900 High Accuracy Actuator, 73690900, High Accuracy Actuator, Accuracy Actuator, Actuator

References

- User Manual

Manuals+, Privacy Policy

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