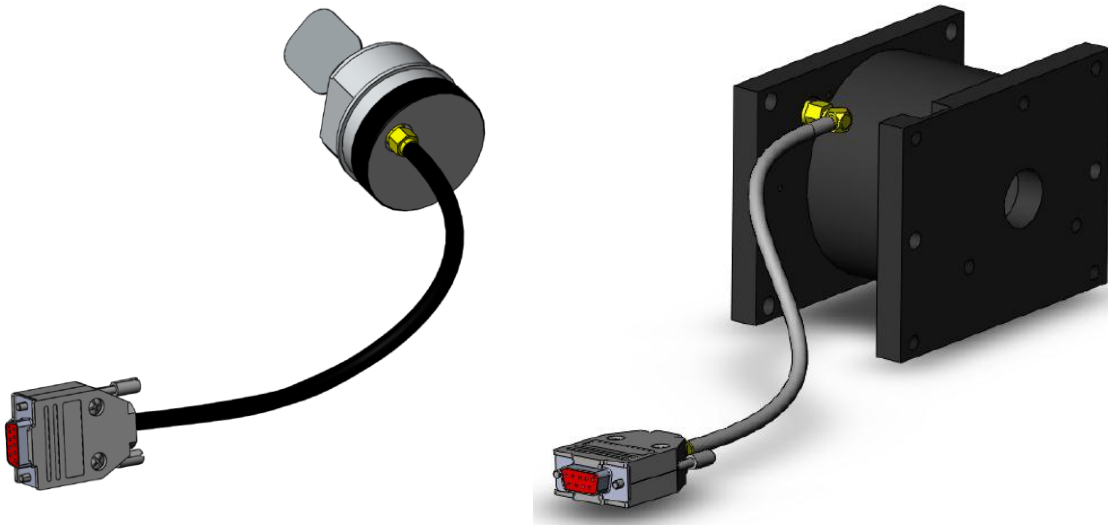


## FEATURES

- Analog to SDP transfer protocol convertor
- Sub-D 9 pin female connector for power and analog setpoint input
- Differential analog voltage input for controlling the setpoint (-10V/+10V)
- SMA output Coax connector for direct connection to rthor smart deflectors



## TYPICAL APPLICATION CONNECTIONS

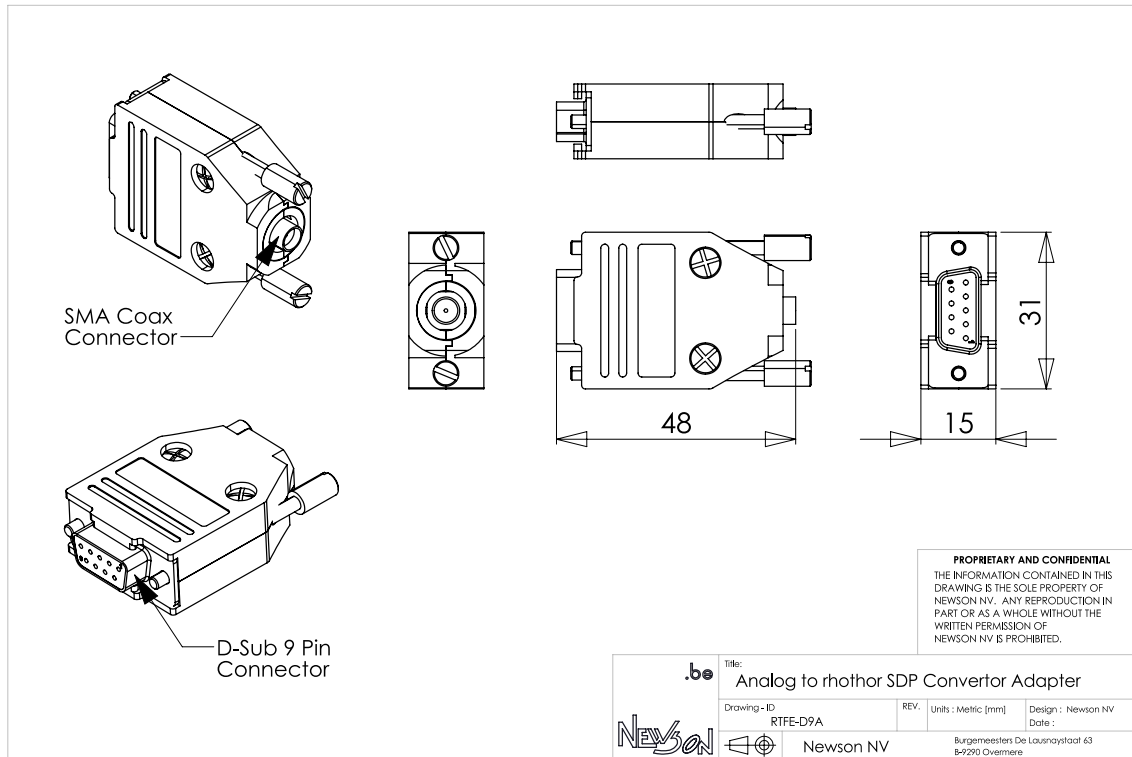


## PIN DESCRIPTION

The 9-pin Sub-D Female connector has following signals:

Pin No.	Name	Description
1	IN.	Setpoint input
6	IN+	Setpoint input
4	DC0V	Power supply input 0V
9	DC+12V	Power supply input 12V
2,3,5,7,8	NC	Reserved, DO NOT CONNECT!

## DIMENSIONS



## COMPONENT DATA

Description	Name	Min	Type	Max	Units
Power supply	DC+12V	9	12	13	V
Adapter current	$I_{DC+12V}$		0.02		A
Adapter load	$I_{Ld}$			2	A (*)
Adapter delay	$t_d$		128		$\mu\text{sec}$
Differential setpoint input range	$IN_+ - IN_-$	-10		10	V (**)
Common mode setpoint input range	$(IN_+ + IN_-)/2$	-5		5	V
Input impedance	$Z_{in}$		10		$k\Omega$
Tightening torque			0.5		Nm

(\*) Load depends on connected deflector type and movements.

(\*\*) Differential input above maximal rating can damage the device.

## ANALOG INPUT

The analog input of RTFE-D9A adapter supports both single ended and differential operation.

In *single ended operation*, the input "IN." is connected to ground.

The analog signal is applied to input "IN+," and has a range from -10 to +10 volt.

The direction of the deflector can be changed by swapping the analog inputs.

In this case the IN+ must be connected to ground and a single ended signal applied to input IN..

In *differential mode* both inputs are connected to analog signals.

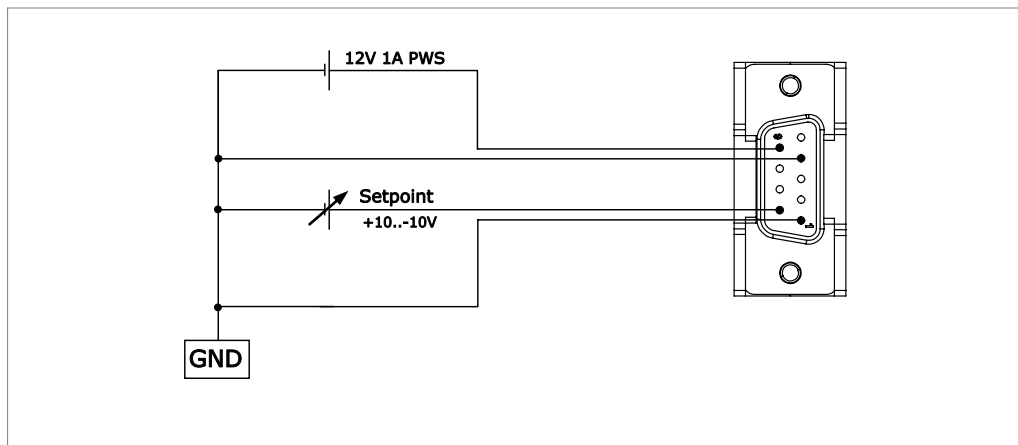
One signal ranges from 0 to 10 volt while the other ranges from 10 to 0 volt.

The common voltage must be kept below 5 volt.

## TYPICAL CONNECTIONS

The power supply return of the frontend adapter (0V) should be connected to ground.

This will minimize common mode noise and guarantees that common mode range on the input is met.



There is no power up sequence restriction. The deflector can be powered up at all times.