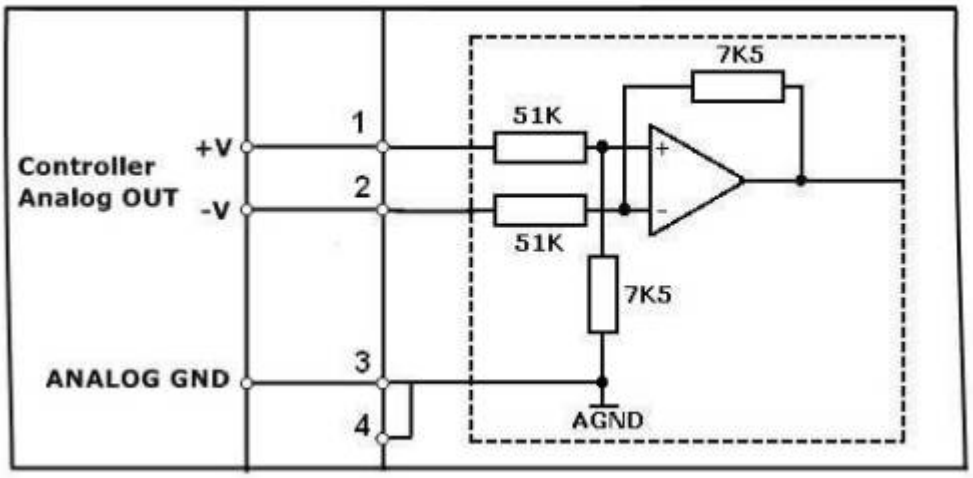
Drive with analog reference

Upon request, the servo amplifier can be controlled via analog input, also it is fitted with an output “line driver” 5V type encoder emulation.
The resolution of the emulated encoder is the same as the main motor encoder. You can't set an encoder emulation with a variable number of pulses / revolutions. It is possible to find a comprehensive overview of the device connections in paragraph 6. The connectors to be used for driving in analog are C9: analog input; C7 encoder emulation and C5: inputs and outputs.

Analog Input

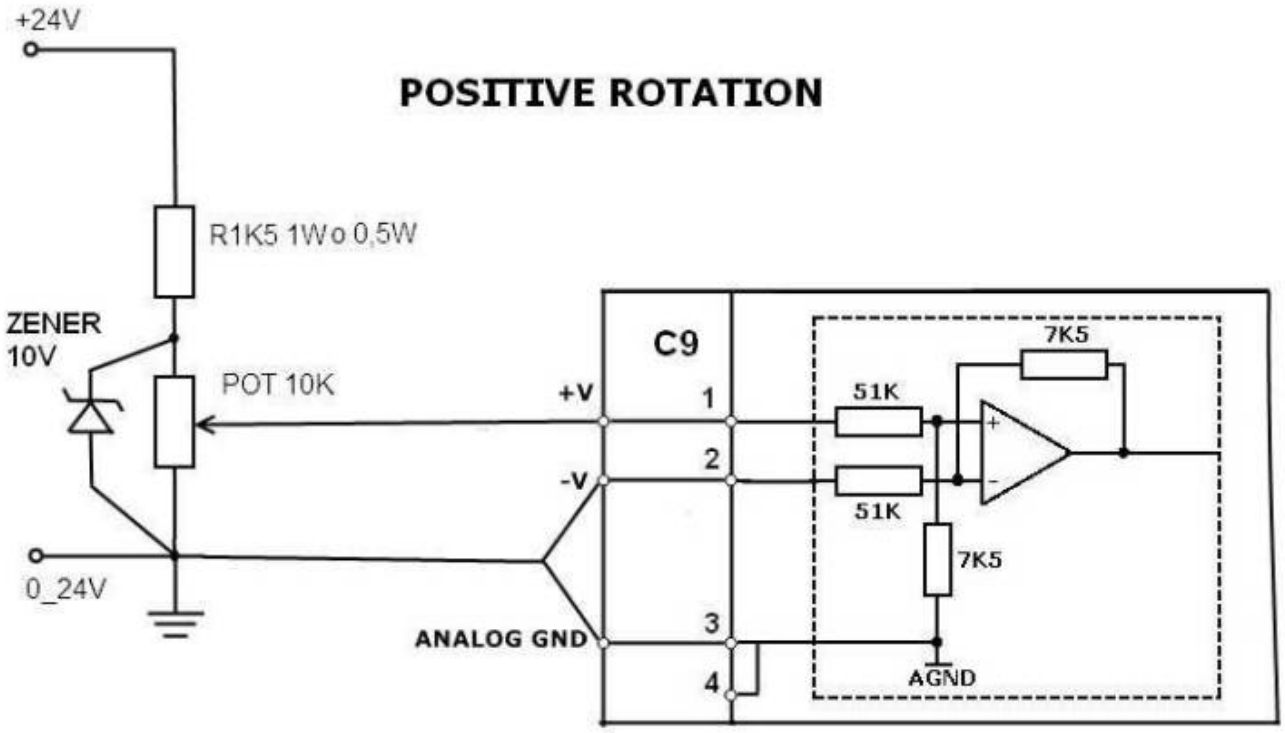
Analog-In 1 Input (terminal C9/1-4), differential analog input 12bit
Differentials input voltage of max. ± 10 V
Connect the controller (PLC or NC) as following indicated

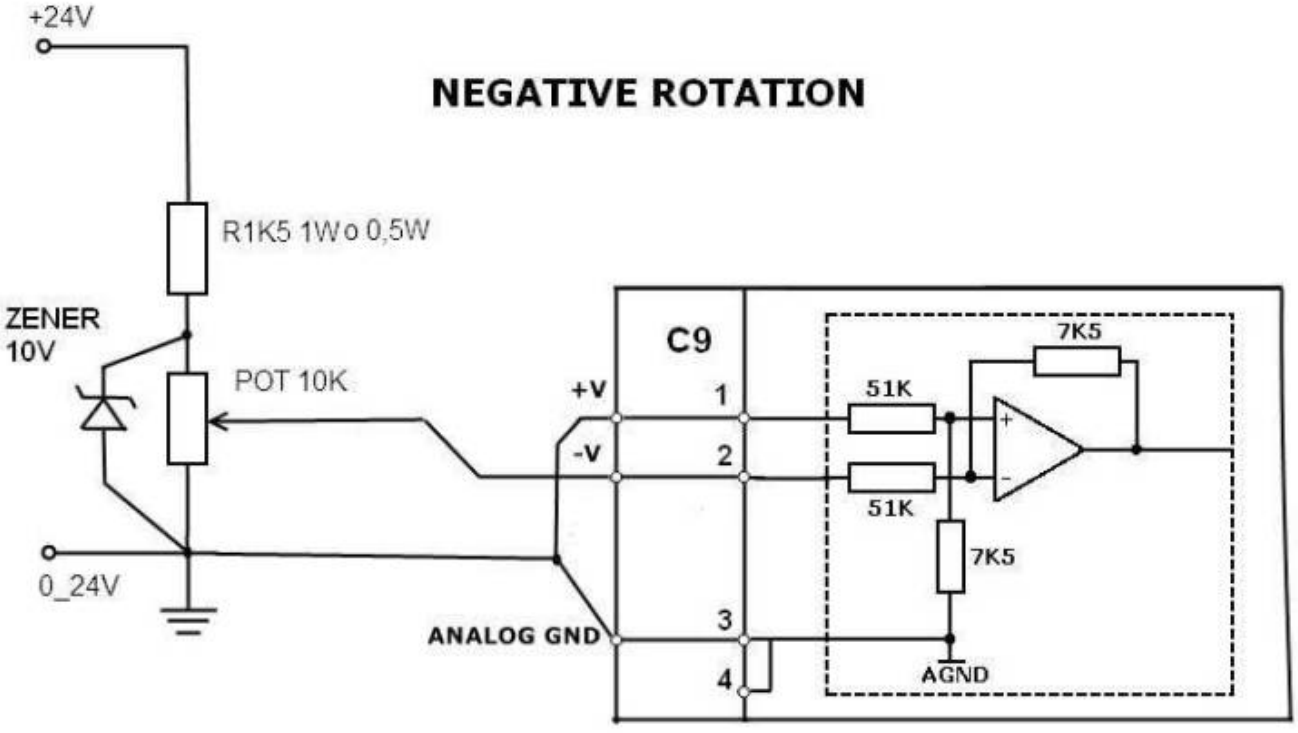
CONNECTOR C9		
PIN	NAME	DESCRIPTION
1	Analog In1 +	Analog input 1 positive
2	Analog In1 -	Analog input 1 negative
3	AGND	Analog Ground
4	AGND	Analog Ground



Example using a potentiometer

If you want to drive the servo amplifier by a potentiometer and you do not have a ± 10V dual voltage power supply, the voltage can be derived using the following circuitry. The first diagram shows how to drive the motor with a voltage from 0 to 10V, the second one with a voltage from 0 to-10V.





Encoder Emulation

With the “analog” option the connector C7 provides the emulation of the motor encoder. The C8 connector on the contrary will not mount.
The emulated encoder output is a 5V opto line-driver type. The emulated encoder resolution is fixed

and it is the same as the motor main encoder (default 2048ppr)

C7 DESCRIPTION		
PIN	NAME	DESCRIZIONE
1	/CHA	Negative A channel
2	/CHB	Negative B channel
3	GND	Ground of the simulated encoder interface
4	CHZ	Z Channel.
5	PE	Shield, connected to the servo amplifier ground
6	N.C.	Not connected
7	CHB	B Channel.
8	/CHZ	Negative Z channel
9	CHA	A Channel.