





# **IMPORTANT !**

- 1) Flyback diode for oil pump control must be conected ! Otherwise the device will fail.
- 2) Power ground (terminal 15) should be connected with separate wire.
- 3) +12V must be switched power.
- 4) Use 3A fuse for switched +12V and 10A fuse for Oil Pump power.
- 5) If you use VSS input, connect pullp resistor to VSS input (10K)



#### Konfiguracja

Freq. Limit to turn off – the frequency on VSS input that cause controller to set torque transfer to 0%Freq. Limit interpolation start – the frequency of VSS input whene the controller start to interpolate of torque transfer.

#### Here is the diagram how does it work



Configuration	×
Basic settings	
Freq. limit to turn off	2000 🕂
Freq. limit interpolation start	666
Max oil temperature (C)	90.0
Analog In#2 as hand brake input	
Advanced settings	
Step scale	40 🛨
Stepper motor speed	80 -
Pump ctrl. frequency x 10 [Hz]	β0 <u>→</u>
Pump DC	60 -
Cancel	ОК

**Max oil temperature** – if the temperature of Haldex module oil is greater that this parameter the controller switch the Haldex module off, and the torque transfer is set to 0%.

## Advanced settings (only for advanced users!)

Step scale – maximum number of Haldex actuator steps
Stepper motor speed – the speed of actuator
Pump ctrl. Frequency – oil pump control PWM freqency (Hz \* 10)
Pump DC - oil pump control DC



### Logged parameters



The device monitors and log the following parameters

**Oil temp.** - current Haldex module oil temp.,

- **Req. pos** required torque transfer in %
- Curr. Pos current torque transfer in %
- Freq. In frequenct on VSS input
- **Analog** #2 voltage on analog #2 input.
- **PumpDC** oil pump control Duty Cycle,
- User switch state of activation switch