Motor feedback

This page describes the **motor feedback** connection of the MBD servo drive. The drive supports both rotary and linear motor feedback, depending on the application.

Rotary motor feedback

The standard feedback device used is an incremental encoder with Hall.

C6 CONNECTOR		
PIN	NAME	DESCRIPTION
1	HU	U Hall sensor
2	HV	V Hall sensor
3	HW	W Hall sensor
4	+5V	Encoder supply 5VDC@250mA
5	GND	GND encoder supply
6	CHA	A Channel incremental encoder
7	CHB	B Channel incremental encoder
8	CHZ	Z Channel incremental encoder
9	SHIELD	Shield
10	N.C.	Not Connected
11	GND	Negative motor thermal sensor -
12	STM	Positive motor thermal sensor +
13	CHA-	Encoder negative A channel
14	CHB-	Encoder negative B channel
15	CHZ-	Encoder negative Z channel

Linear motor feedback - SIN/COS 1Vpp

For linear motors the SIN/COS 1Vpp feedback is used.

C6 CONNECTOR		
PIN	NAME	DESCRIPTION
1	N.C.	
2	N.C.	
3	N.C.	
4	+5V	Encoder supply 5VDC@250mA
5	GND	GND encoder supply
6	CHA	SIN+
7	CHB	COS+
8	CHZ	
9	SHIELD	Shield
10	N.C.	Not Connected
11	GND	Negative motor thermal sensor -
12	STM	Positive motor thermal sensor +
13	CHA-	SIN-
14	CHB-	COS-
15	N.C.	

Feedback notes

- **Rotary motor**: incremental encoder with Hall signals (standard). - **Linear motor**: SIN/COS 1Vpp feedback (1 sine period per pole pitch). - The feedback is connected to the C6 motor feedback connector. - Verify the feedback type and the signal levels against the motor datasheet before commissioning; the pinout is shown in the motor feedback connection page.

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