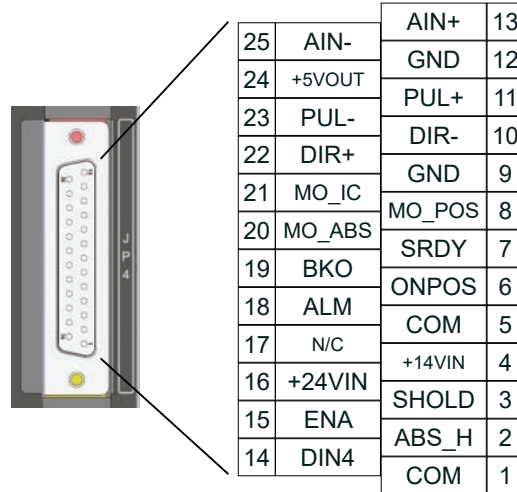


## 2.3 JP4 Main I/O Terminal Details

### 2.3.1 JP4 Specification

- JP4 Main signal I/O  
Connector Type: D-Sub 25 pin female  
Recommended Wire Gauge: 0.2mm<sup>2</sup> (AWG24)

- Pin Layout (Viewed from drive header side)



- Pin Details

See section 2.3.2 for interface circuit type examples

Pin No.	Symbol	Details	I/O	Interface Circuit
1	GND	Internal Signal Ground	NA	NA

Pin No.	Symbol	Details	I/O	Interface Circuit
2	ABS_H	- Absolute encoder auto home - Servo motor position returns to absolute encoder zero position. Servo starts from absolute zero. - Active Low, servo drive runs to absolute zero when input LOW.	Input	A

Pin No.	Symbol	Details	I/O	Interface Circuit
3	SHOLD	- Servo hold input (Positive Direction) - Servo drive ignores command input - Active High	Input	A

See section 2.3.2 for interface circuit type examples

Pin No.	Symbol	Details	I/O	Interface Circuit
4	+14VIN	- External +14VDC input - Supply power for digital input circuit A	Input	A

Pin No.	Symbol	Details	I/O	Interface Circuit
5	COM	- Output photocoupler open collector common - For digital output circuit B	Output	B

Pin No.	Symbol	Details	I/O	Interface Circuit
6	ONPOS	- Servo on position output - Photo transistor ON when on position, output Low - Servo On Position if motor position error within value set by <i>OnPosRange</i> parameter. - Refer to section 5.1 for parameter setting details	Output	B

Pin No.	Symbol	Details	I/O	Interface Circuit
7	SRDY	- Servo Ready Output - Photo transistor ON, output Low when servo ready for command	Output	B

Pin No.	Symbol	Details	I/O	Interface Circuit
8	MO_POS	- Position error monitor output - Refer to section 4.6 for details	Output	E

Pin No.	Symbol	Details	I/O	Interface Circuit
9	GND	- Internal signal ground	NA	NA

Pin No.	Symbol	Details	I/O	Interface Circuit
10	DIR-	DIR-, B-, CCW- pulse reference	Input	C

Pin No.	Symbol	Details	I/O	Interface Circuit
11	PUL+	PUL+, A+, CW+ pulse reference	Input	C

Pin No.	Symbol	Details	I/O	Interface Circuit
12	GND	- Internal signal ground	NA	NA

Pin No.	Symbol	Details	I/O	Interface Circuit
13	AIN+	- Analog reference input POSITIVE	Input	D

See section 2.3.2 for interface circuit type examples

Pin No.	Symbol	Details	I/O	Interface Circuit
14	DIN4	- Optional digital input 4 - By default, input is set to servo drive Alarm Reset	Input	A

Pin No.	Symbol	Details	I/O	Interface Circuit
15	ENA	- Servo enable/disable input - Active Low (servo disabled when low) - Motor coasts when servo disabled (shaft free) - Disable clears all pulse/analog commands - Disable clears all position calculation and error	Input	A

Pin No.	Symbol	Details	I/O	Interface Circuit
16	+24VIN	- External +24VDC input - Supply power for digital input circuit A	Input	A

Pin No.	Symbol	Details	I/O	Interface Circuit
17	N/C	- By default, this pin is not used, do not connect - Optional +14VDC output, max Current Draw: 100mA	Output	NA

Pin No.	Symbol	Details	I/O	Interface Circuit
18	ALM	- Servo alarm output - Photo transistor ON when servo alarmed, output Low - When servo drive alarmed, output toggled Low/High at 1Hz period interval	Output	B

Pin No.	Symbol	Details	I/O	Interface Circuit
19	BKO	- Holding brake output - Refer to section 2.6 for wiring details - Refer to section 3.3.2 for timing details	Output	Section 2.6

Pin No.	Symbol	Details	I/O	Interface Circuit
20	MO_ABS	- Absolute encoder position monitor output - Refer to section 4.6 for details	Output	E

See section 2.3.2 for interface circuit type examples

Pin No.	Symbol	Details	I/O	Interface Circuit
21	MO_IC	- Servo drive output current monitor - Refer to section 4.6 for details	Output	E

Pin No.	Symbol	Details	I/O	Interface Circuit
22	DIR+	DIR+, B+, CCW+ pulse reference	Input	C

Pin No.	Symbol	Details	I/O	Interface Circuit
23	PUL-	PUL-, A-, CW- pulse reference	Input	C

Pin No.	Symbol	Details	I/O	Interface Circuit
24	+5VOUT	- Servo drive internal +5VDC output - Max current draw: 50mA	Output	NA

Pin No.	Symbol	Details	I/O	Interface Circuit
25	AIN-	- Analog reference input NEGATIVE	NA	D