

Dynapar 1.5HP Motor Encoder		DB9-M
Designation	Pin	Pin
Signal A	A	1
Signal B	B	2
5V +	D	3
Com	F	4
Signal A-	H	5
Signal B-	I	6

GS3-Feedback Card		DB9-M
Designation	Pin	Pin
Signal A	A	1
Signal A-	A-	5
Signal B	B	2
Signal B-	B-	6
5V +	VP	3
Com	DCM	4

Omron Spindle Shaft Encoder		DB9-S
Designation	Pin	Pin
5V+ V In	5V+	1
Phase A Out	A	2
Phase B Out	B	3
Phase Z Out	Z	4
0V Common	Com	5

GS3-22P0 VFD Drive		Pin
Designation	Pin	Pin
10v Power out	10V +	
0-10V Pot	AI-1	
Analog Sig Com	AI-0	
Fwd/Stop	DI-1	
Rev/Stop	DI-2	
Dig Sig Com	DCM	



RELAY KA1		Pin
NC	1	
NC	4	
NO	5	
NO	8	
IN	9	
IN	12	
Gnd	13	
24V	14	

RELAY KA2		Pin
NC	1	
NC	4	
NO	5	
NO	8	
IN	9	
IN	12	
Gnd	13	
24V	14	

RELAY KA3		Pin
NC	1	
NC	4	
NO	5	
NO	8	
IN	9	
IN	12	
Gnd	13	
24V	14	

RELAY KA4		Pin
NC	1	
NC	4	
NO	5	
NO	8	
IN	9	
IN	12	
Gnd	13	
24V	14	

RELAY KA5		Pin
NC	1	
NC	4	
NO	5	
NO	8	
IN	9	
IN	12	
Gnd	13	
24V	14	

TB2 Mesa 7176																							
Gnd	Step X-	Step X+	Dir X-	Dir X+	5V+	Gnd	Step Z-	Step Z+	Dir Z-	Dir Z+	5V+	Gnd	Step 3-	Step 3+	Dir 3-	Dir 3+	5V+	Gnd	Step 4-	Step 4+	Dir 4-	Dir 4+	5V+
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

TB3 Mesa 7176																							
Gnd	Step B-	Step B+	Dir B-	Dir B+	5V+	Enc A+	Enc A-	Gnd	Enc B+	Enc B-	5V+	IDX+	IDX-	Gnd	RS-422 RX+	RS-422 RX-	RS-422 TX+	RS-422 TX-	5V+	5V+ PS	5V+ PS	Gnd	Gnd
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

TB4 Mesa 7176							
Spindle -	Spin Out	Spindle -	NC	Spin ENA-	Spin ENA+	Spin Dir-	Spin Dir+
1	2	3	4	5	6	7	8

TB1 Mesa 7176							
V Field	V Field	V Field	V Field	VIN	NC	NC	Ground
1	2	3	4	5	6	7	8

TB5 Mesa 7176																								
Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

TB6 Mesa 7176																								
Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input	Input
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

Coolant Pump Contactor			
A1	A2	1	2
Gnd	24V+	L In	L Out

24V Power Supply			
V+	V-	V+	V-
G	N	L	

X Axis Stepper Drive					
PLS+	MA+	1			
PLS-	MA-	2			
DIR+	MB+	3			
DIR-	MB-	4			
DB9-X					
PB+	1				
PB-	2				
PA+	3				
PA-	4				
VCC	5				
GND	6				

Z Axis Stepper Drive					
PLS+	MA+	1			
PLS-	MA-	2			
DIR+	MB+	3			
DIR-	MB-	4			
DB9-Z					
PB+	1				
PB-	2				
PA+	3				
PA-	4				
VCC	5				
GND	6				

DB9-H SN04-N2 Home Sw				X Axis
1	NC	NPN-NC	24V+	
3	24V	24V+	Com	
4	0V	Com		

DB9-H SN04-N2 Home Sw				Z Axis
2	NC	NPN-NC	24V+	
3	24V	24V+	Com	
4	0V	Com		

X-Stepper Motor	
1	MA+
2	MA-
3	MB+
4	MB-
X-Encoder	
1	PB+
2	PB-
3	PA+
4	PA-
5	VCC
6	GND

Z-Stepper Motor	
1	MA+
2	MA-
3	MB+
4	MB-
Z-Encoder	
1	PB+
2	PB-
3	PA+
4	PA-
5	VCC
6	GND