Wiring Connections

6K to SLVD : Torque or Velocity Mode

SLVD		6K		71-017003-10
Connector	Pin	DB15	Function	Color
X4	1 (REF+)	3	CMD+	Black
X4	2 (REF-)	6	CMD-	Red
X1	9 (IN 0)	7	SHUTDOWN NO	Brown
X4	9 (+24V)	14	COM	Yellow
X4	7 (OUT 0)	5	DRIVE FAULT	Green

6K to SLVD : Feedback Connection for Torque or Velocity Mode

SLVD		6K	
Connector	Pin	DB9	Function
X3	1	2	A+
X3	2	3	A-
X3	3	4	B+
X3	4	5	B-
X3	5	6	Z+
X3	6	7	Z-
X3	7	9	ISO GND
X3	8	NC	NC
X3	9	NC	NC

6K to SLVD : Step & Direction Mode

SLVD		6K	
Connector	Pin	DB15	Function
X3	1	1	STEP+
X3	2	9	STEP-
X3	3	2	DIR+
X3	4	10	DIR-
X1	9	7	SHUTDOWN NO
X4	9	14	COM
X4	7	5	DRIVE FAULT

SLVD : BE or NeoMetric Motor Resolver Cable Connection

SLVD			BE/Neo Resolver Feedback Cable
Connector	Pin	Function	Color
X1	1	EXC+	Brown
X1	2	EXC-	White
X1	3	SIN+	Black
X1	4	SIN-	Red
X1	5	COS+	Green
X1	6	COS-	Blue
X1	7	0V	Shield
X1	8	0V	

SLVD : BE or NeoMetric Motor Power Cable Connection

SLVD			BE/Neo Resolver Feedback Cable
Connector	Pin	Function	Color
X6	1	U	Black #1 or Red/Yellow
X6	2	V	Black #2 or White/Yellow
X6	3	W	Black #3 or Black/Yellow
X6	4	L1	
X6	5	L2	
X6	6	L3	
X6	7	Earth	Green/Yellow

6K to SLVD : 24VDC Logic Power Connector

SLVD		6K
Connector	Pin	Aux Connector
X4	9	24VDC PWR
X4	10	24VDC RTN

SLVD

Quick Reference Guide

SLVD Series Servo Drives

Compumotor Division
Parker Hannifin Corporation
p/n 88-020928-01B

The two procedures below are to be used if running the SLVD in Torque or Velocity mode. Please refer to the *SLVD User's Manual* for all other modes or for returning the drive to factory defaults. **SLVD parameters should be set in the order listed below.** PR16, PR17, and PR18 are tuning parameters for Velocity mode, and the values listed are for an unloaded motor. They may need to be adjusted for a loaded motor. **If a Value below is left blank, refer to the specific motor parameters on the following page.**

Torque Mode Operation

Parameter	Value	Default	Description
Pb. 99.6	**1**	0	Extended Menu Enable
Pb. 94.3	**1**	0	Enable Modify Basic Parameters
Pr. 29		0	# of Motor Poles
Pr. 32		0	Rated Speed, RPM
Pr. 33		0.0	Continuous Motor Current, Arms
Pr. 34	**2**	0	# of Resolver Poles
Pr. 46		0.0	Motor Resistance, ohms
Pr. 47		0.0	Motor Inductance, mH
Pb. 99.15	**"donE"**	N/A	Save Parameters
Pr. 18	**1**	1	Bandwidth of the Speed Regulator
Pr. 19		100.0	Peak Motor Current (Arms) as % of Peak Drive Current
Pr. 30		0	Resolver Offset
Pb. 99.15	**"donE"**	N/A	Save Parameters
Pb. 40.2	**0**	0	User/Reserved Reference Selection
Pr. 31	**1**	0	Operating Mode (Torque Mode = 1)
Pb. 99.11	**"donE"**	N/A	Set Default Parameters for Operating Mode
Pr. 2	**1000**	3000	Analog Reference Scale
Pb. 40.2	**1**	0	User/Reserved Reference Selection
Pb. 42.2	**1**	0	Torque Control
Pb. 99.15	**"donE"**	N/A	Save Parameters

Velocity Mode* Operation

Parameter	Value	Default	Description
Pb 99.6	**1**	0	Extended Menu Enable
Pb. 94.3	**1**	0	Enable Modify Basic Parameters
Pr. 29		0	# of Motor Poles
Pr. 32		0	Rated Speed, RPM
Pr. 33		0.0	Continuous Motor Current, Arms
Pr. 34	**2**	0	# of Resolver Poles
Pr. 46		0.0	Motor Resistance, ohms
Pr. 47		0.0	Motor Inductance, mH
Pb. 99.15	**"donE"**	N/A	Save Parameters
Pr. 16	**35**	120	Stiffness of the Speed Regulator
Pr. 17	**400**	2000	Damping of the Speed Regulator
Pr. 18	**1**	1	Bandwidth of the Speed Regulator
Pr. 19		100.0	Peak Motor Current (Arms) as % of Peak Drive Current
Pr. 30		0	Resolver Offset
Pb. 99.15	**"donE"**	N/A	Save Parameters
Pb. 42.2	**0**	0	Torque Control
Pb. 40.2	**0**	0	User/Reserved Reference Selection
Pr. 31	**0**	0	Operating Mode (Velocity Mode = 0)
Pb. 99.11	**"donE"**	N/A	Set Default Parameters for Operating Mode
Pr. 2	**User defined****	3000	Analog Reference Scale
Pb. 40.12	**0**	0	Digital/Analog Reference Selector
Pb. 99.15	**"donE"**	N/A	Save Parameters

* SLVD drives ship from the factory in Velocity Mode

** Example - If Pr.2 = 1000, then 10 V = 1000 rpm

Compumotor Motor/SLVD5* parameters

BE230D		Parameter
Kt	0.17	
Poles	8	Pr29
Resolver offset	3800	Pr30
Rated speed + 500	5500	Pr32
Continuous Current	2.40	Pr33
Resistance	4.57	Pr46
Inductance	7.72	Pr47
Peak Current	71.40	Pr19

BE231F		Parameter
Kt	0.18	
Poles	8	Pr29
Resolver offset	3800	Pr30
Rated speed + 500	5500	Pr32
Continuous Current	4.03	Pr33
Resistance	1.86	Pr46
Inductance	4.33	Pr47
Peak Current	100.00	Pr19

BE232D		Parameter
Kt	0.56	
Poles	8	Pr29
Resolver offset	3800	Pr30
Rated speed + 500	5500	Pr32
Continuous Current	2.12	Pr33
Resistance	7.72	Pr46
Inductance	21.33	Pr47
Peak Current	64.40	Pr19

BE233F		Parameter
Kt	0.43	
Poles	8	Pr29
Resolver offset	3800	Pr30
Rated speed + 500	5500	Pr32
Continuous Current	3.75	Pr33
Resistance	2.85	Pr46
Inductance	8.14	Pr47
Peak Current	100.00	Pr19

BE341F		Parameter
Kt	0.66	
Poles	8	Pr29
Resolver offset	3800	Pr30
Rated speed + 500	5125	Pr32
Continuous Current	3.96	Pr33
Resistance	1.30	Pr46
Inductance	13.00	Pr47
Peak Current	100.00	Pr19

NO701D		Parameter
Kt	0.27	
Poles	4	Pr29
Resolver offset	-8100	Pr30
Rated speed + 500	8000	Pr32
Continuous Current	2.62	Pr33
Resistance	5.52	Pr46
Inductance	6.49	Pr47
Peak Current	79.20	Pr19

NO702E		Parameter
Kt	0.43	
Poles	4	Pr29
Resolver offset	-8100	Pr30
Rated speed + 500	7600	Pr32
Continuous Current	3.04	Pr33
Resistance	5.22	Pr46
Inductance	7.90	Pr47
Peak Current	91.20	Pr19

NO703F		Parameter
Kt	0.48	
Poles	4	Pr29
Resolver offset	-8100	Pr30
Rated speed + 500	7100	Pr32
Continuous Current	4.17	Pr33
Resistance	3.36	Pr46
Inductance	6.07	Pr47
Peak Current	100.00	Pr19

SLVD Alarm Codes

0	No Alarm		8	Auxiliary Alarm
1	Overvoltage		10	PLC check-sum
2	Undervoltage		11	Parameter check-sum
3	Overcurrent		14	Braking Overload
4	Resolver Alarm		15	Default Parameters
6	Drive Overheating		16	Adjustment Error
7	External Alarm			

* Parameter values shown are for use with the SLVD5. Values will vary when using the SLVD1 or SLVD2.