

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.