

## POWER SUPPLY AND CONNECTOR KIT

### PS42V20AF and PS75V6AF POWER SUPPLIES

- Open frame linear unregulated power supply
- Primary side is fused
- Screw terminal access to AC input and DC output
- Toroid transformer for minimal voltage drop and minimal EMI
- Shunt can be added with the suffix -S100 to the part number



Part Number	Input Voltage and Frequency	No Load Voltage	Full Load		Nominal Wattage	Shunt	Weight (Nom.)
			Voltage	Current			
PS42V20AF110	110 VAC/60 HZ	43 VDC	34 VDC	20 Amps	680 W	No	16.5lbs (7.5kg)
PS42V20AF220	220 VAC/50 HZ	43 VDC	34 VDC	20 Amps	680 W	No	16.5lbs (7.5kg)
PS42V20AF110S1	110 VAC/60 HZ	43 VDC	34 VDC	20 Amps	680 W	Yes	17lbs (7.7kg)
PS42V20AF220S1	220 VAC/50 HZ	43 VDC	34 VDC	20 Amps	680 W	Yes	17lbs (7.7kg)
PS75V6AF110*	110 VAC/60 HZ	84 VDC	67.5 VDC	6 Amps	400 W	No	11.8lbs (5.4kg)
PS75V6AF220*	220 VAC/50 HZ	84 VDC	67.5 VDC	6 Amps	400 W	No	11.8lbs (5.4kg)
PS75V6AF110S1*	110 VAC/60 HZ	84 VDC	67.5 VDC	6 Amps	400 W	Yes	12.3lbs (5.6kg)
PS75V6AF220S1*	220 VAC/50HZ	84 VDC	67.5 VDC	6 Amps	400 W	Yes	12.3lbs (5.6kg)

\* to be used with ServoStep products only

**Warning:** The PS75V6A Power Supply is intended for use with the ServoStep product line ONLY. If you use this power supply with the Legend or OEM Series SmartMotor, it will result in immediate overvoltage failure. It is recommended that you add a 6 Amp slow blow fuse on AC input.

### CONNECTOR KIT

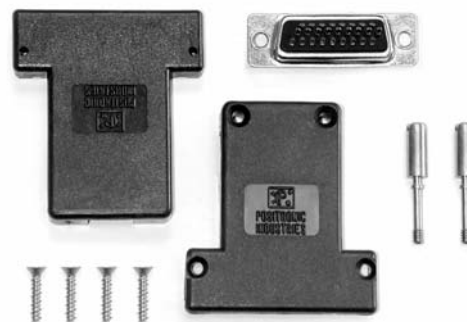
The ServoStep Connector Kit includes all pins, 26-pin connector shell and connector hood for use with the ServoStep product line.

**Note:** Main power pins (9, 18, and 26) and Main Ground pins (7, 8, and 25 respectively) must all be used when powering the ServoStep Series SmartMotors to avoid exceeding the current ratings of any one pin.

Pins with the same description are electrically connected internally in the motor.

#### ServoStep connector kit includes:

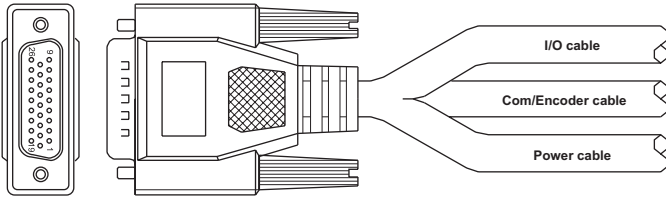
Description	Animatics Part Number	Manufact.	Manufact. Part Number
Connector Hood	CN149	Positronics	206062-1
26-pin H-density D-Sub con	CN285	Digikey	T826-ND



# RECOMMENDED COMMUNICATION CABLES

## CBLSS26D-10M CABLES

The CBLSS26D-x cable is used to bring Amplifier and Controller power, RS485, and input/output signal to the ServoStep motor. This cable will work with all Animatics ServoStep motors. The cable has a 26 pin high-density mating connector to be plugged into the ServoStep motor on one end and flying lead on the other end. Cable length is 10 meters.



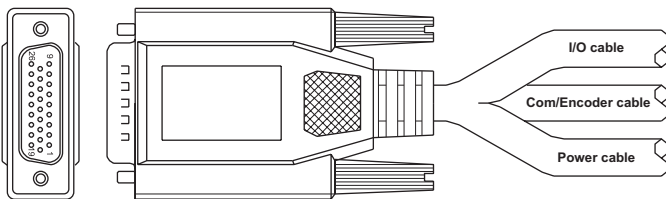
I/O cable, shielded (13 Cond. x 26 AWG)				
PIN	Color	Type	Name	Description
1	orn		A	5V-TTL general use In/Out/10-Bit Analog Input
2	grn		B	5V-TTL general use In/Out/10-Bit Analog Input
3	blu		C	5V-TTL general use In/Out/10-Bit Analog Input
4	pnk		D	5V-TTL general use In/Out/10-Bit Analog Input
5	gry		E	5V-TTL general use In/Out/10-Bit Analog Input
6	vio		F	5V-TTL general use In/Out/10-Bit Analog Input
7	wht		G	5V-TTL general use In/Out/10-Bit Analog Input
8	blk		Gn	Ground (also connected to Main Ground)
14	brn/wht		Brk	Drives hard to Main Ground with Brake control
15	blk/wht		Bl	Drives hard to Gnd when NOT-Trajectory
16	brn		+5V	Ref. to TTL I/O, max load 200mAmps
23	red/wht		Bo	Drives hard Gnd when Drive Amp is ON
24	red		Po	Control power input (20-48VDC)

Com/Encoder cable, shielded (8 Cond. x 26 AWG)				
PIN	Color	Type	Name	Description
10	brn	twisted	Ael	Encoder A/Step Input (isolated)
11	gry	pair	Bel	Encoder B/Step Input (isolated)
13	orn	twisted	4a	RS485-A (isolated)
21	blu	pair	4b	RS485-B (isolated)
19	yel	twisted	Aeo	Encoder A Output (isolated)
20	vio	pair	Beo	Encoder B Output (isolated)
12	blk	twisted	Gl	Isolated Ground ref.
22	red	pair	5l	+5VDC ref. (isolated) max load 140mAmps

Power cable, shielded (2 Cond. x 16 AWG)				
PIN	Color	Type	Name	Description
9				
18	red	hybrid	P	Main power input (20-80VDC max)
26				
8				
17	blk	hybrid	Gn	Main System Ground
25				

## CBLIO55ST-10M CABLES

The CBLIO55SS-10M cable allows you to wire Amplifier and Controller power, RS485 communication, and 24VDC I/O to the ServoStep motor. This cable is similar to the CBLSS26D-x cable except that the I/O is optically isolated. The cable converts the motor's I/O ports A, B, C, D, and G to 24VDC inputs, and ports E, F, BRK, Bt, and Bo to 24VDC outputs. Input setting can be used as either sinking or sourcing depending on the how the Common input line is connected. Cable length is 10 meters.



I/O cable, shielded (14 Cond. x 26 AWG)					
PIN	Color	Type	Name	Description	
24VDC OPTO isolated I/Os	blk		comm IN	24VDC I/O input common to 24VDC or 24VDC return	
	orn		A IN	24VDC I/O input A (sinking/sourcing inout)	
	grn		B IN	24VDC I/O input A (sinking/sourcing inout)	
	blu		C IN	24VDC I/O input A (sinking/sourcing inout)	
	pnk		D IN	24VDC I/O input A (sinking/sourcing inout)	
	wht		G IN	24VDC I/O input A (sinking/sourcing inout)	
	brn		comm OUT	24VDC I/O output common to 24VDC return	
	gry		E OUT	Output E, 24VDC sinking	
	vio		F OUT	Output F, 24VDC sinking	
	brn/wht marks		Brk OUT	Brake control, 24VDC release, 0VDC engage	
	blk/wht marks		Bt OUT	Trajectory bit status, 24VDC Bt=1, 0VDC Bt=0	
	red/wht marks		Bo OUT	Drive On/Off status, 24VDC Bo=1, 0VDC Bo=0	
	8	red/blk marks		Gn	Ground (also connected to Main Ground)
	24	red		Pc	Control power input (20-35VDC max)

Com/Encoder cable, shielded (8 Cond. x 26 AWG)				
PIN	Color	Type	Name	Description
10	brn	twisted	Ael	Encoder A/Step Input (isolated)
11	gry	pair	Bel	Encoder B/Step Input (isolated)
13	orn	twisted	4a	RS485-A (isolated)
21	blu	pair	4b	RS485-B (isolated)
19	yel	twisted	Aeo	Encoder A Output (isolated)
20	vio	pair	Beo	Encoder B Output (isolated)
12	blk	twisted	Gl	Isolated Ground ref.
22	red	pair	5l	+5VDC ref. (isolated) max load 140mAmps

Power cable, shielded (2 Cond. x 16 AWG)				
PIN	Color	Type	Name	Description
9				
18	red	hybrid	P	Main power input (20-80VDC max)
26				
8				
17	blk	hybrid	Gn	Main System Ground
25				