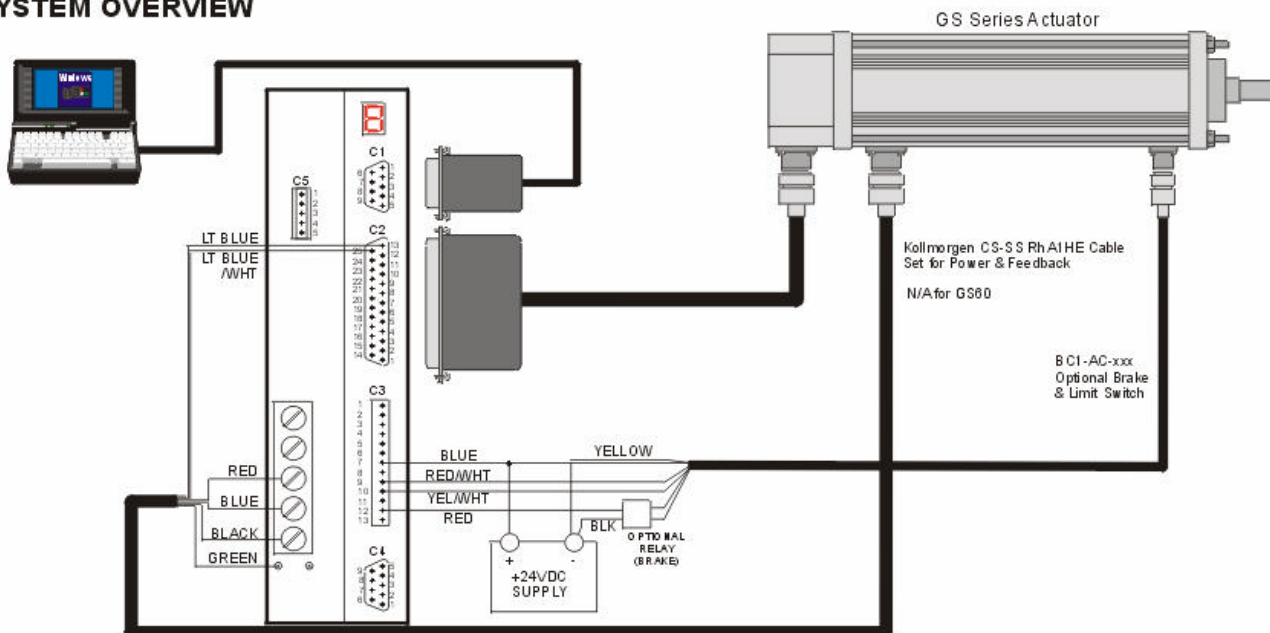


## 7.4 Kollmorgen SERVOSTAR CD Drive with Exlar GS/X Series Actuators (M Connector Option)

### SYSTEM OVERVIEW



**Dangerous voltages exist so use extreme caution when operating this equipment. Sufficient energy remains in the SERVOSTAR to cause motion even with the power removed. To verify that the equipment is safe, insure that the voltage across the DC+ and DC- terminals is at 0VDC. At startup, reduce the current to below the rated current, such that accelerating torque is limited, until proper control is verified.**

### SETTING UP THE SERVOSTAR DRIVE TO RUN EXLAR GS/X SERIES ACTUATORS

In order to program the drive to run the Exlar actuators, the motor parameter file provided by Exlar must be loaded into the Servostar directory, which by default is named "c:\Program files\KMTG Motion Suite\user.m03". Once the motor file is loaded, the following steps will enable the SERVOSTAR drive to run the Exlar actuators.

1. Connect the serial cable from the PC to C1 of the SERVOSTAR drive.
2. With the motor power cable disconnected from the motor, apply power to the drive.
3. Double click on the SERVOSTAR icon to start the program.
4. Click OK to continue from the About MotionLink page.
5. Click on Com Setup and enter the communication parameters for the computer and click on OK.
6. Click on the Scan For Drives button to initiate communication with the drive.
7. Click on Start to begin the drive initialization process.
8. From the New Amplifier Startup Screen, click Start.
9. Select the bus voltage and drive configuration switch settings, then click Exit.
10. Under Motor Description, select the appropriate Exlar actuator.
11. Click on the "To Drive" icon to download the motor data to the drive. Then click on Exit.
12. Continue on through the Startup process by running the "Opmode" "Tune", and "Backup" steps.

Basic GS/X Series Parameter Settings for Kollmorgen SERVOSTAR CD Drives (1)							
		GS/X20	GS/X30	GS/X40	GS45	GSX50	GS60
Maximum Speed	RPM	5000	3000	3000	2400	2400	2400
Back EMF Compensation	%	50	50	50	50	50	50
Motor Inertia	Kg-m <sup>2</sup>	See Inertia Table in section 7.0					
Motor Poles		GS-6 GSX-8	GS-6 GSX-8	GS-8 GSX-8	GS-6	8	GS-6 GSX-8
AGain @ Peak Current	%	40	40	40	40	40	40
AGain @ Cont. Current	%	70	70	70	70	70	70
AGain @ Zero Current	%	100	100	100	100	100	100
Torque Advance P	Elec. Degrees	23	23	23	23	23	23
Torque Advance C	Elec. Degrees	10	10	10	10	10	10
Speed Advance V	Elec. Degrees	25	25	25	25	25	25
Speed Advance ½ V	Elec. Degrees	15	15	15	15	15	15

**Note 1** Appropriate motor files may be obtained from Exlar and downloaded to SERVOSTAR CD drives. Use user.m03 file found on www.exlar.com

### CABLES FOR KOLLMORGEN SERVOSTAR CD DRIVE AND GS/X SERIES ACTUATORS (M CONNECTOR OPTION)

Kollmorgen Cable Part Numbers (Goldline XT cables)	
<b>GS/X20, GS/X30</b>	
Feedback	CS-SS-RHA1HE
Motor Power	CS-SS-RHA1HE
Brake/Limit Switch	BC1-AC-XXX (Exlar Cable)
<b>GS/X40, GSX50, GS45</b>	
Feedback	CS-SS-RHA1HE
Motor Power	CS-SS-RHA1HE
Brake/Limit Switch	BC1-AC-XXX (Exlar Cable)
<b>GS60</b>	
Feedback	CS-SS-RHA1HE
Motor Power	PC3-AC-XXX (Exlar Cable)
Brake/Limit Switch	BC1-AC-XXX (Exlar Cable)

