

Linear Servo Amplifier

This amplifier is used to drive LSVG/LSVHG series high speed linear servo valves. With an optimal design for the servo valves, the amplifier can maximize the valve performance.



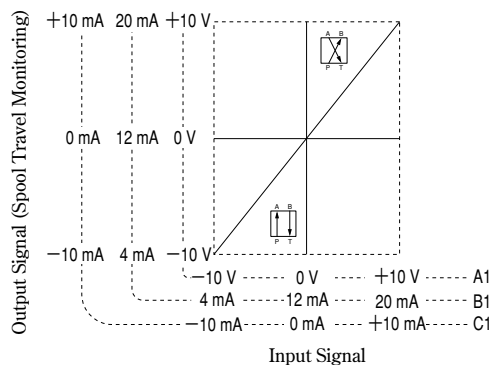
Specifications

Model Numbers	AMLS- *-D48- *-10	AMLS- *-D24- *-10
Description		
Power Supply	48 V ± 2.4 V DC (200 VA or more)	24 V ± 1.2 V DC (100 VA or more)
Rated Output Current	Continuous ±2 A (4 A Peak)	Continuous ±2 A (3 A Peak)
Input/Output Signal	Output Signal = Spool Travel Monitoring A1 : Voltage Signal ±10 V (R _i = 100 kΩ, R _L ≥ 10 kΩ) B1 : Current Signal 4 - 20 mA (R _i = 200 Ω, R _L = 100 - 500 Ω) C1 : Current Signal ±10 mA (R _i = 200 Ω, R _L = 100 - 500 Ω)	
Control Input /Output Signal	a) Servo "ON" Input/Alarm Reset Input: Photocoupler Input Voltage: +15 V DC to +28 V DC, Input Impedance: 2.2 kΩ b) Overcurrent Output (CURR.AL.)/Deviation Alarm Output (CRTL.AL.): Photocoupler Output Voltage: Max. 50 V DC, Current: Max. 30 mA	
Ambient Temperature	0 - 50 °C	
Ambient Humidity	20 - 90 %Rh (No Condensation)	
Mass	1.8 kg	

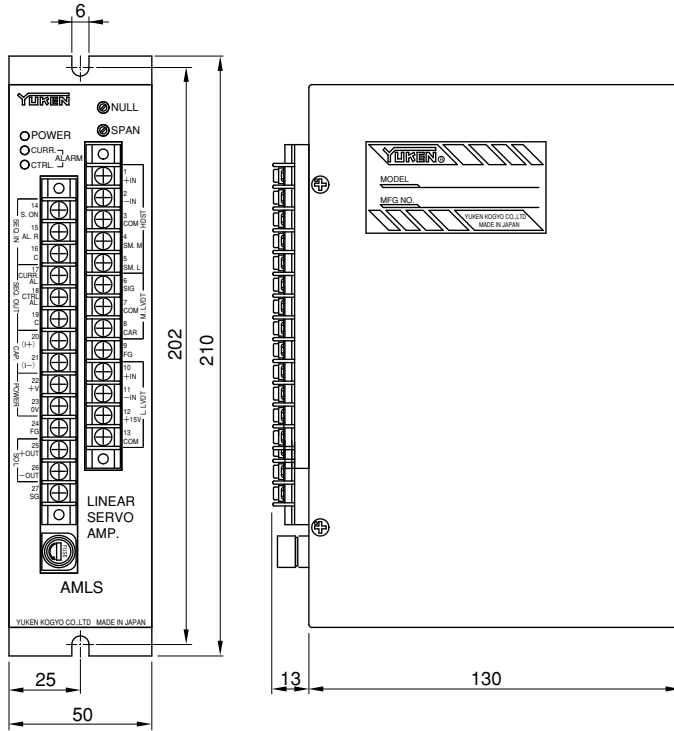
Model Number Designation

AMLS	—A	—D48	—A1	—10
Series Number	Applicable Valve Type	Supply Voltage	Input Signal/ Spool Travel Monitoring	Design Number
AMLS : Linear Servo Amplifier	A : LSVG-03-4/10/20/40 B : LSVG-03-60 C : LSVHG-06-900 C2 : LSVHG-04 D : LSVHG-06-1300 LSVHG-10-3800	D48 : DC 48 V D24 : DC 24 V	A1: Voltage Signal ±10 V B1: Current Signal 4 - 20 mA C1: Current Signal ±10 mA	10

I/O Signal Characteristics



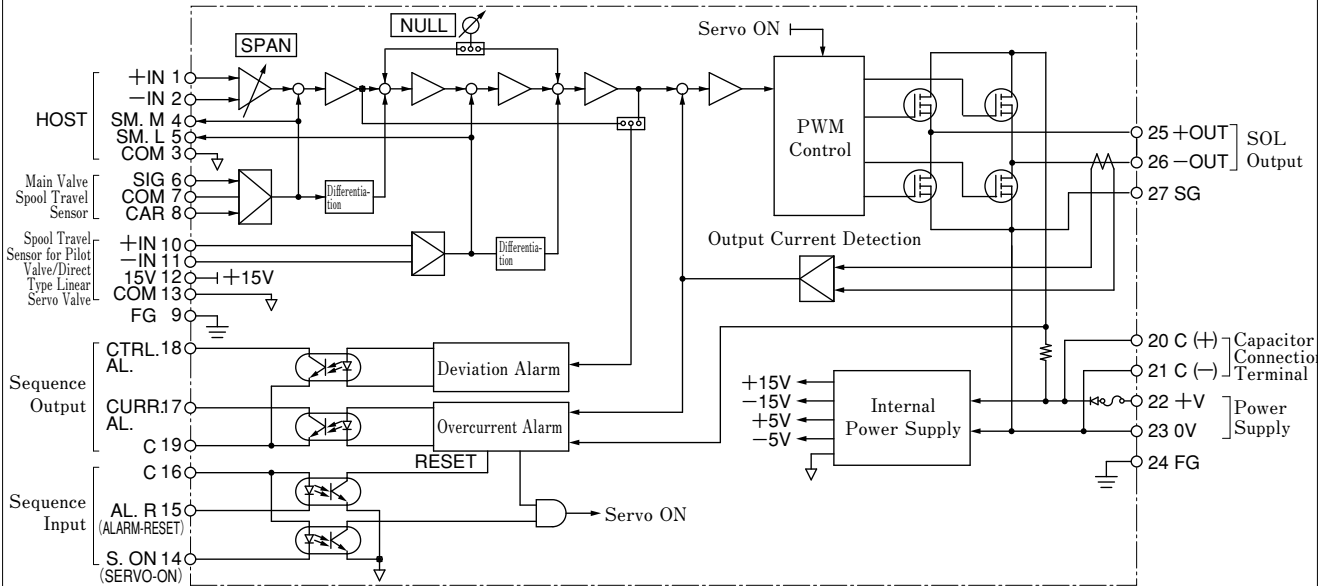
Appearance/Terminal Names



● Terminal Name

No.	Terminal Name	
1	Input Signal	+IN
2		-IN
3	Common	COM
4	Sensor	Main Valve Spool
5	Monitoring	Pilot Valve/Direct Type Linear Servo Valve
6		SIG
7	Main Valve Spool Travel Sensor	COM
8		CAR
9	Frame Grounding	FG
10		+IN
11	Spool Travel Sensor for Pilot Valve/Direct Type Linear Servo Valve	-IN
12		+15V
13		COM
14	Sequence	Servo ON
15	Input	Alarm Reset
16		Input Common
17	Sequence	Overcurrent Alarm
18	Output	Deviation Alarm
19		Output Common
20	Capacitor Connection Terminal	Cap.(+)
21		Cap.(-)
22	Power Supply	+V
23		0V
24	Frame Grounding	FG
25	SOL Output	+OUT
26		-OUT
27	Signal Grounding	SG

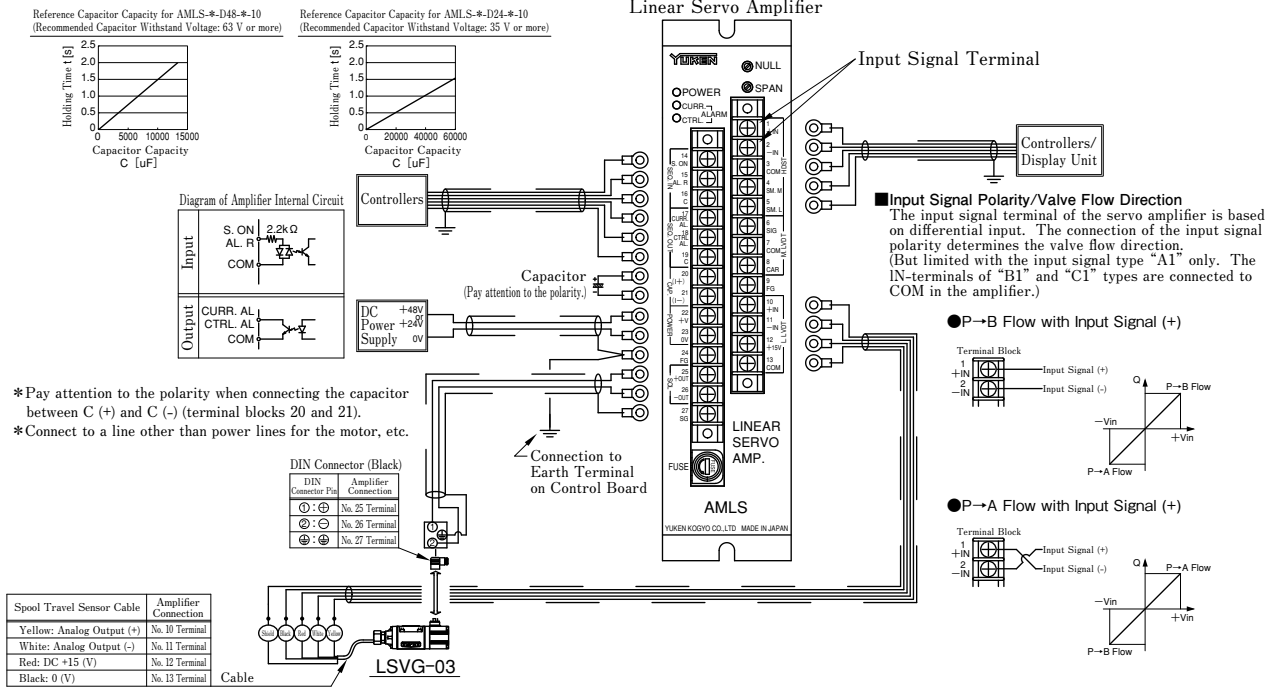
Block Diagram



Wire Connection Diagram

● AMLS-A, AMLS-B

* To hold the valve spool at the neutral position for a few seconds upon power failure or after power-off, connect the capacitor between C (+) and C (-) (terminal blocks 20 and 21).



● AMLS-C, AMLS-C2, AMLS-D

* To hold the valve spool at the neutral position for a few seconds upon power failure or after power-off, connect the capacitor between C (+) and C (-) (terminal blocks 20 and 21).

