

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

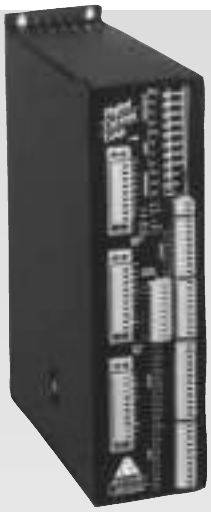
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Rockwell / Anorad D-Serv-DLM1* at our website: *Click HERE*

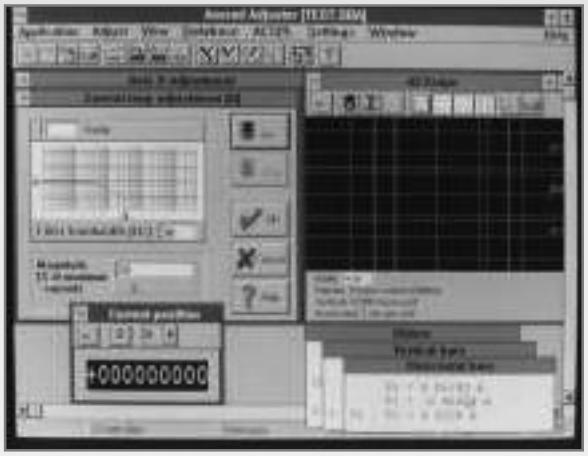
# Digital Servo Controllers

## D-Serv/ M-Serv





- Matched to all Anorad linear motors
- 1-3 axis digital servo controllers
- Integral digital amplifier and power supply
- Sinusoidal software commutation
- Graphical User Interface with Softscope
- 20 kHz servo update rate, per axis



Many other Anorad servo controllers are available, including bus based (PC & VME) and C-programmable. Anorad linear motors also work with many third party controls. Contact factory for details.

### Specifications

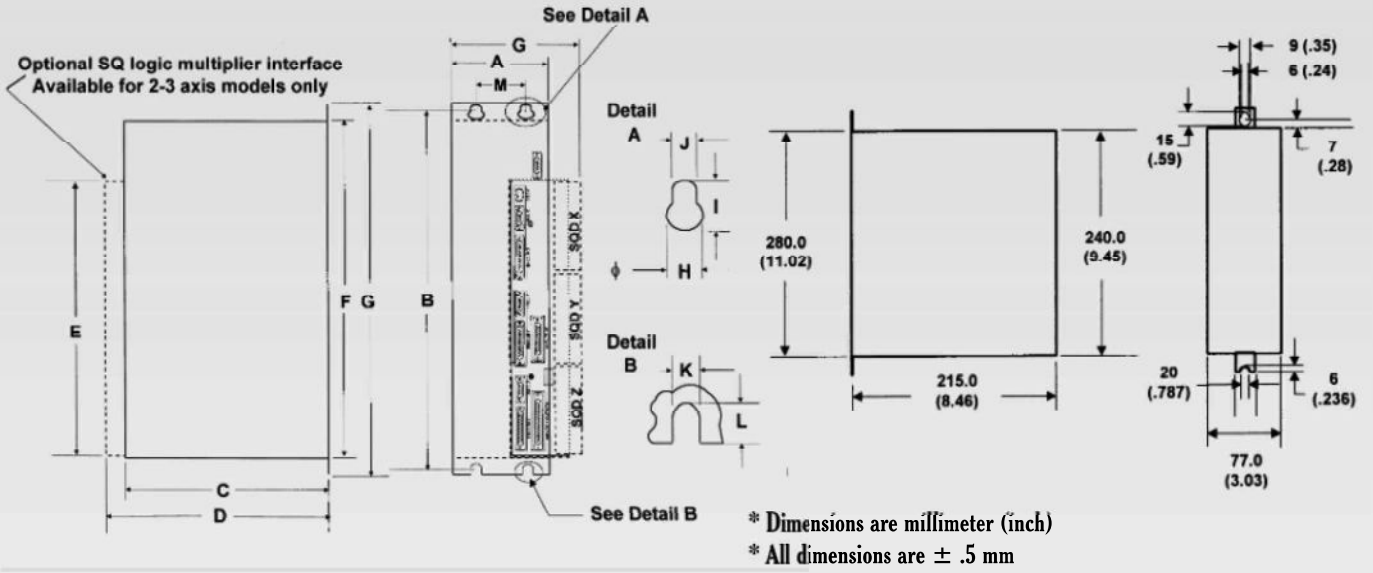
| Number of Axes | 1 | | | 2 | 3 |
|---|---|---|---|---|---|
| **Model Number** | M-Serv-MLH-1 | D-Serv-DLM-1 | D-Serv-DLH-1 | D-Serv-DLM-2 | D-Serv-DLM-3 |
| **Order Number** | 70641-A | 70782-A | 70642-A | 71028-A | 70855-A |
| **Continuous Output Current (RMS)** | 2.1 A | 7.1 A | 10.6 A | 4.6 A | 4.6 A |
| **Peak Output Current (RMS)** | 4.3 A | 14 A | 21 A | 9.2 A | 9.2 A |
| **AC Input Voltage** | 85 Vac - 240 Vac<br>47-63 Hz Single Phase | 115 or 230 VAC<br>47-63 Hz Single or 3 Phase | | | |
| **Bus Voltage @ 230 VAC** | 320 Vdc | | | | |
| **Bus Voltage @ 115 VAC** | 170 Vdc | | | | |
| **Continuous Power** | 25 W | 100 W | | | |
| **Peak Power** | 1K W | 1.5 KW | | | |
| **Update Period** | 50 µs (20kHz) | | | | |
| **Current Resolution @ 2 kHz** | 14 BITS | | | | |
| **Velocity Resolution** | 14 BITS | | | | |
| **Current Loop Bandwidth** | 2.5 kHz | | | | |



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

## D-SERV

## M-SERV




| ORDER NO. | Controller | # axes | A | B | C | D | E | F | G | H | I | J | K | L | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70782-A, 70642-A | D-Serv | 1 | 80 (3.15) | 338.5 (13.33) | 230 (9.06) | n/a | n/a | 302 (11.89) | 348 (13.70) | 8 (.32) | 11 (.43) | 5 (.20) | 5 (.20) | 8 (.32) | 50 (1.97) |
| 71028-A, 70855-A | D-Serv | 2 or 3 | 154 (6.06) | 429 (16.89) | 258 (10.16) | 281.94 (11.10) | 330.2 (13.00) | 404 (15.91) | 450 (17.72) | 12 (.47) | 18 (.71) | 7 (.28) | 7 (.20) | 18 (.71) | 100 (3.94) |
| 70641-A | M-Serv | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |

## Controller

- Servo update rate: 20 kHz
- Servo algorithm: Second order filter, acceleration and velocity feedforward
- Position range: ± 999,999,999 counts
- Velocity range: ± 1 to 20,000,000 counts/sec (D-Serv)
  ± 1 to 10,000,000 counts/sec (M-Serv)
- Acceleration range: 1,000 to 127,000,000 counts/s$^2$

## Software Attributes

- Error-mapping, Real-time data collection, Position event generator (optional)
- Built-in motion modules: linear and repetitive point-to-point move, search for contact , jogging, master-slave, electronic cam, registration mark moves, index searching at any speed
- Conditional statements, special states and variables which reflect motion, arrays, variables, counters, nested subroutines, arithmetic and logical expressions
- Automatic execution routines, interactive data entry

## Communication/Inputs/Outputs

- Communication: RS232, RS422, up to 9,600 baud
- Encoder input: 3 channel differential line receiver
- Analog inputs: ± 10 V, 12 bit resolution
  (2) /axis D-Serv, (1) /axis M-Serv
- Analog outputs: (1) /axis ± 10V, 10 bit resolution
- Dedicated inputs: (2) limits, opto-isolated, 5V /axis, (1) drive fault
- Digital inputs: (8) single, (16) multi axis, opto-isolated D-Serv;
  (6) opto-isolated M-Serv
- Digital outputs: (8) single, (16) multi-axis, opto-isolated
  Supported by a built-in 24V isolated supply
  50 mA output sink capability D-Serv
  (2) opto isolated, CE floating M-Serv
- Brake driver: Built in 24V (0.75A) for brake/clutch control/axis (single axis D-Serv only)

## Protection, Diagnostics and Error Handling

- All errors handled by automatic routines
- Programmable software limits, stall and dynamic force limits
- Automatic drive shutdown when: emergency stop is activated, position feedback signal is lost, user-defined position error is exceeded, five volt overvoltage, and overheating
- Automatic warning if the axis moves away from its target by more than a pre-defined distance
- Host communication with check-sum validation
- Immediate status response to “begin motion” commands indicating either a successful execution or a reason for failure
- Immediate detailed error message for abnormal motion termination
- I/O status and memory integrity
- Built-in hardware watch-dog timer


Artisan Technology Group | Quality Instrumentation... Guaranteed | (888) 88-SOURCE | www.artisantg.com

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP