

SLM/SLG Linear Actuator with Class I Division 2 Option

The SLM/G rotary motors are available with Class I Division 2 certification for hazardous locations. A hazardous location is defined as a place where concentrations of flammable gases or vapors occur. Electrical equipment that must be installed in these locations is designed and tested to ensure it does not initiate an explosion due to arcing contacts or high surface temperature of equipment.

The SLM/G motors with this option offer the same product performance of the standard product offering as described in the SLM/G section of this catalog. Please see those sections for mechanical specifications.

Class I Division 2 Options include:

- Resolver feedback
- Handwheel

The SLM/G actuators are ideal for operating quarter turn or multi turn valves or shaft driven dampers in hazardous environments. These actuators are directly coupled shaft-to-shaft, eliminating ungainly mechanisms needed by the linear motion of pneumatics. Our compact T-lam servo motors outperform any standard motor, providing excellent continuous modulating service.

Typical Applications

Chemical Processing
Fuel Skids
Oil & Gas Upstream & Downstream
Power Utilities
Basis Weight
Pulp and Paper
Damper Control
Valve Control



SLM/SLG
Linear Actuator



163694
Class I, Division 2

Features

T-LAM™ Segmented lamination stator technology

Resolver feedback

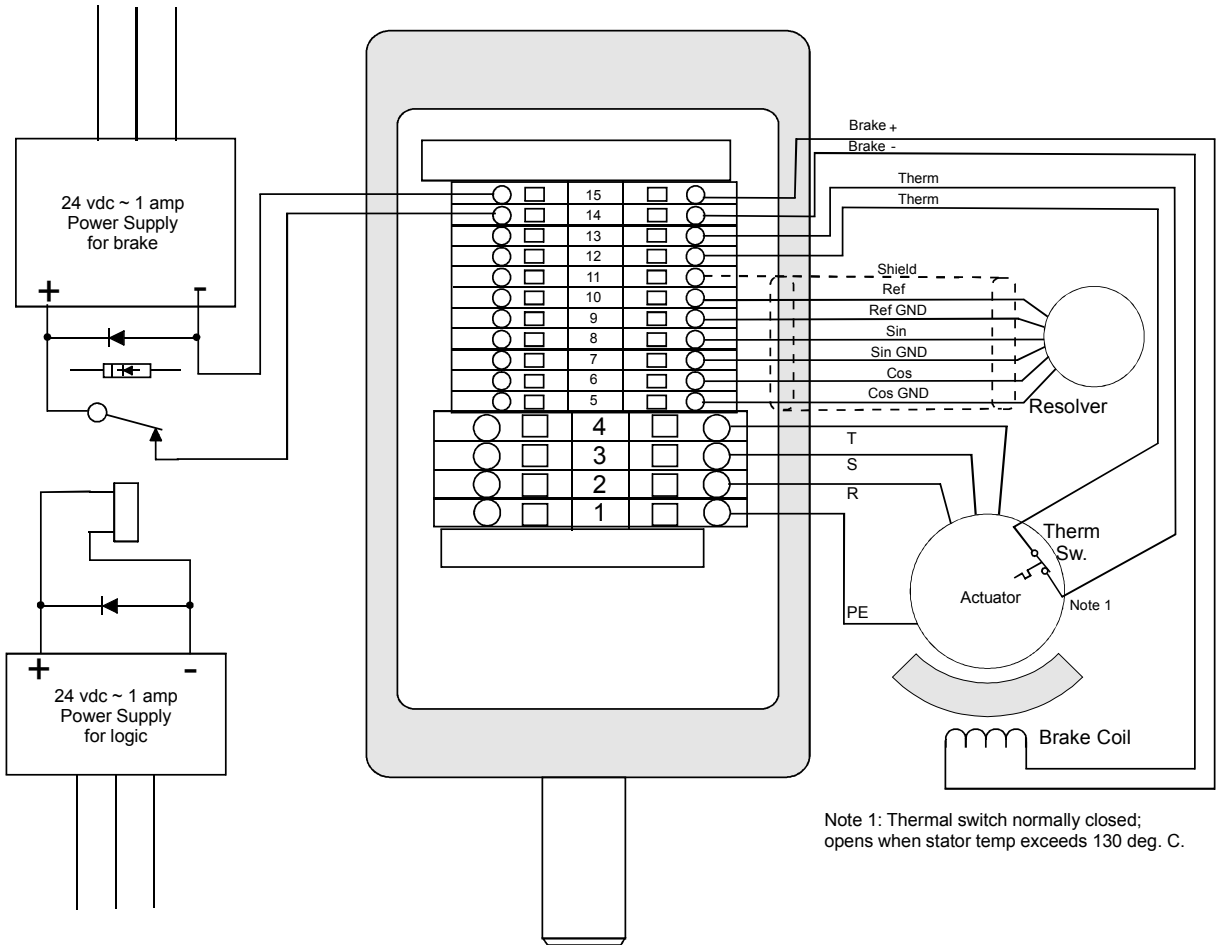
High load bearing design

Integrated armature and sun gear for SLG models

Class I, Div 2 groups A, B, C & D certified

Terminal box with NPT ports

Terminal Box Wiring Diagram



Ordering Information

Please use the ordering guide from the SLM and SLG (page 147) sections with two callout selections as described below. The required connections selection is "T" and the required options selection is "NI".

SLM/GAAA - BBB - CDEF - GGG - HHH - II - (XX-#####)

T

NI

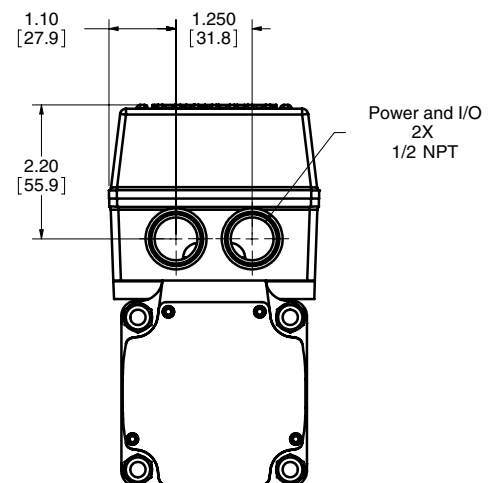
Connections

T = Terminal box with NPT ports

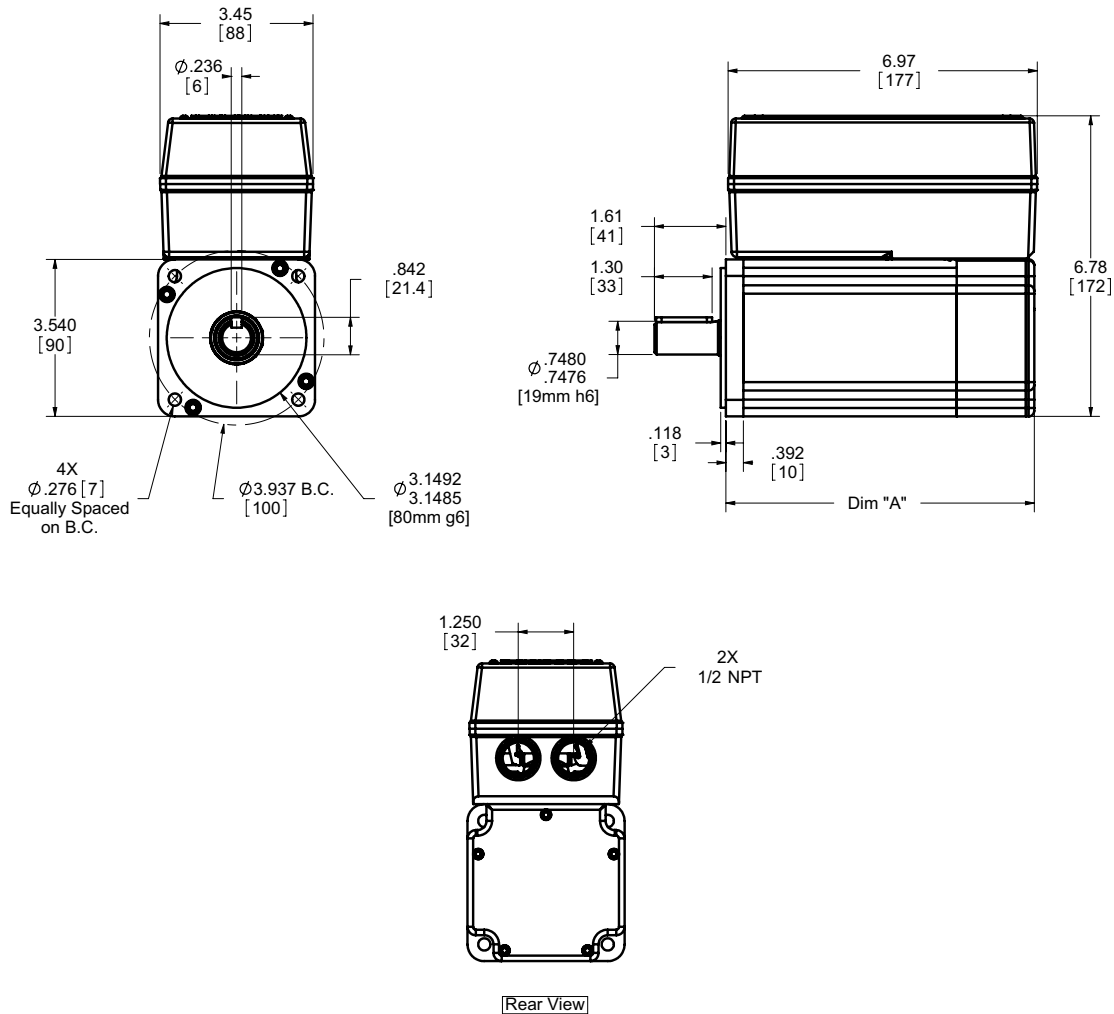
Options

NI = Non-Incendive

Terminal Box Dimensions



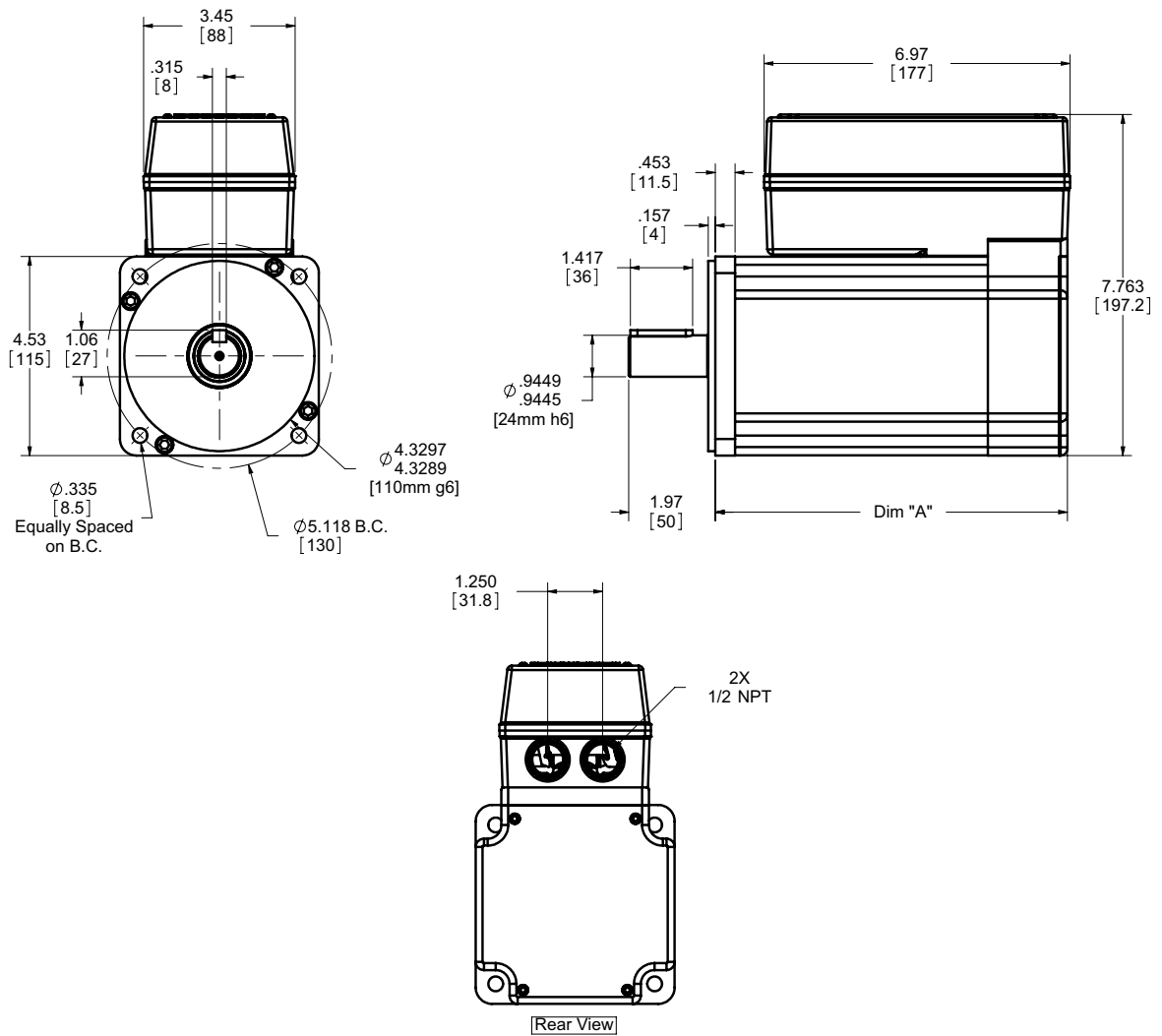
SLM090 Class I Div 2 Option



SLM090 Dim. in. (mm)	1 Stack Stator	2 Stack Stator	3 Stack Stator	1 Stack Stator with Brake	2 Stack Stator with Brake	3 Stack Stator with Brake
A	NA	5.65 (144)	6.65 (169)	5.96 (151)	6.96 (177)	7.96 (202)

Face plate edge is not intended for alignment of shaft (use pilot)

SLM115 Class I Div 2 Option

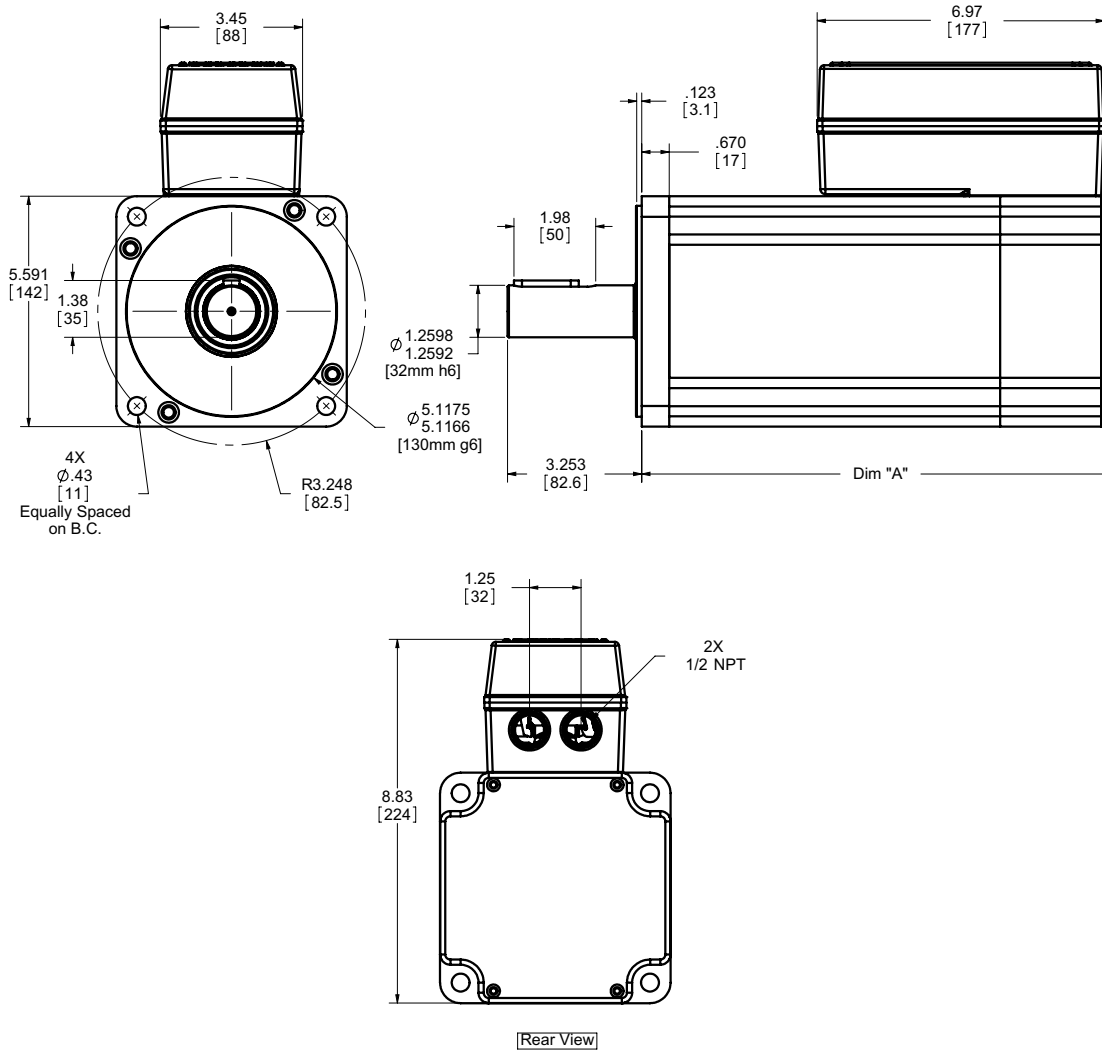


SLM115 Dim in. (mm)	1 Stack Stator	2 Stack Stator	3 Stack Stator	1 Stack Stator with Brake	2 Stack Stator with Brake	3 Stack Stator with Brake
A	6.02 (153)	8.02 (203.7)	10.02 (254.5)	7.75 (196.9)	9.75 (247.7)	11.75 (298.5)

Face plate edge is not intended for alignment of shaft (use pilot)

Drawings subject to change. Consult Exlar for certified drawings.

SLM142 Class I Div 2 Option

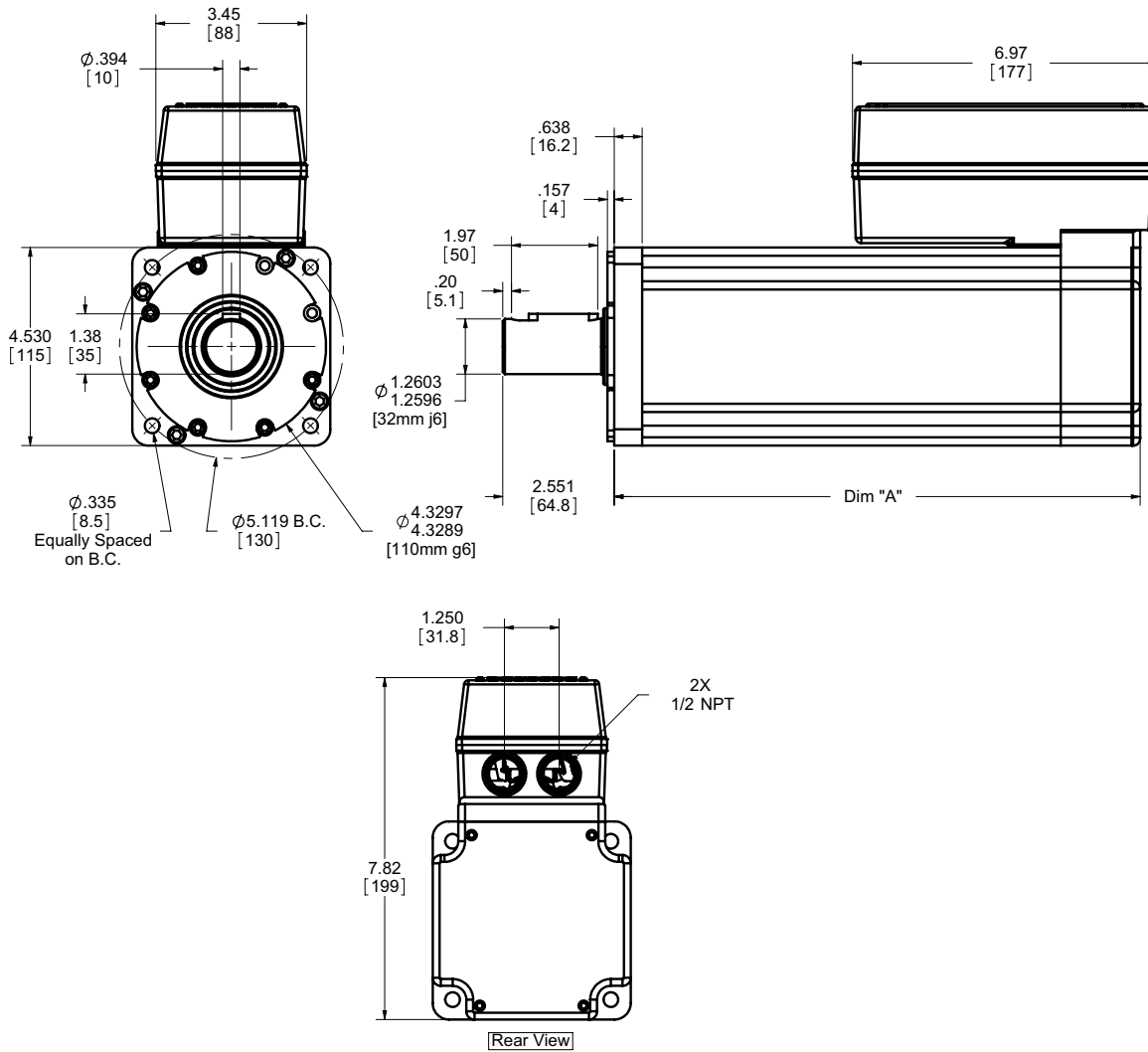


SLM142 Dim. in. (mm)	1 Stack Stator	2 Stack Stator	3 Stack Stator	1 Stack Stator with Brake	2 Stack Stator with Brake	3 Stack Stator with Brake
A	7.87 (199.8)	9.62 (244.2)	11.37 (288.7)	9.53 (241.9)	11.28 (286.4)	13.03 (330.8)

Face plate edge is not intended for alignment of shaft (use pilot)

Hazardous Location SLG115 Class I Division 2

SLG115 Class I Div 2 Option



SLG115 Dim. in. (mm)	1 Stack Stator	2 Stack Stator	3 Stack Stator	1 Stack Stator with Brake	2 Stack Stator with Brake	3 Stack Stator with Brake
A 1 Stage Gearhead	10.03 (254.8)	12.03 (305.6)	14.03 (356.4)	11.58 (294.2)	13.58 (345)	15.58 (395.8)
A 2 Stage Gearhead	11.64 (295.7)	13.64 (346.5)	15.64 (397.3)	13.19 (335.1)	15.19 (385.9)	17.19 (436.7)

Face plate edge is not intended for alignment of shaft (use pilot)

Drawings subject to change. Consult Exlar for certified drawings.

SLM/G = Model Series

SLG = SLG Series Servo Gearmotor
 SLM = SLM Series Servo Motor
 (no gear reduction)

AAA = Motor Frame Size

090 = 90 mm
 115 = 115 mm
 142 = 142 mm

BBB = Gear Reduction Ratio

(leave blank for SLM Motor)
 004 = 4:1 Single Reduction
 005 = 5:1 Single Reduction
 010 = 10:1 Single Reduction
 016 = 16:1 Double Reduction
 020 = 20:1 Double Reduction
 025 = 25:1 Double Reduction
 040 = 40:1 Double Reduction
 050 = 50:1 Double Reduction
 100 = 100:1 Double Reduction

C = Shaft Type

K = Keyed
 R = Smooth/round
 X = Special shaft

D = Connections

T = Terminal box with NPT ports

E = Coating Options (1)

G = Exlar standard
 E = Electroless nickel plated
 F = Food grade white
 X = Special coating

F = Brake Options

B = Brake
 S = Standard no brake

GGG = Feedback Type (Also specify the Amplifier/Drive Model being used when ordering) Resolver Only.

Standard Resolver – Size 15, 1024 line
 (2048 cts) per rev, 2 pole resolver

Custom Feedback: Please consult application engineering:

XX1 = Wiring and feedback device information must be provided and new feedback callout will be created

AB6 = Allen Bradley/Rockwell - Std Resolver

AM3 = Advantec Motion Control - Std Resolver

AP1 = API Controls - Std Resolver

BD2 = Baldor - Std Resolver - BSM motor wiring w/M23 connectors for "M" option

BM2 = Baumuller - Std Resolver

BR1 = B&R Automation - Std Resolver

CO2 = Copely Controls - Std Resolver

CT5 = Control Techniques/Emerson - Standard Resolver – FM/UM/EZ motor wiring w/M23 euro connectors for "M" option

DT2 = Delta Tau Data Systems - Std Resolver

EL1 = Elmo Motion Control - Std Resolver

EX4 = Exlar - Std Resolver

IF1 = Infranor - Std Resolver

IN6 = Indramat/Bosch-Rexroth - Std Resolver – MKD/MHD motor wiring w/M23 Euro connectors for "M" option

JT1 = Jetter Technologies - Std Resolver – JH/JL motor wiring w/M23 euro connectors for "M" option

KM5 = Kollmorgen/Danaher - Std Resolver – AKM motor wiring w/M23 euro connectors for "M" option

LZ5 = Lenze/AC Tech - Std Resolver – MCS motor wiring w/ M23 euro connectors for "M" option

MD1 = Modicon - Std Resolver

MG1 = Moog - Std Resolver

MX1 = Metronix - Std Resolver

MN4 = Momentum - Std Resolver - MN motor wiring w/M23 connectors for "M" option

OR1 = Ormec - Std Resolver

PC7 = Parker Compumotor - Std Resolver – SMH motor wiring w/M23 connectors for "M" option – European only

PC0 = Parker Compumotor - Std Resolver – MPP motor wiring w/PS connectors for "M" option – US Only

PS3 = Pacific Scientific - Std Resolver – PMA motor wiring w/M23 connectors for "M" option

SM2 = Siemens - Std Resolver – 1FK7 motor wiring w/M23 connectors for "M" option

SW1 = SEW/Eurodrive - Std Resolver – CM motor wiring w/ M23 euro connectors for "M" option

WD1 = Whedco - Std Resolver

H = Motor Stacks

1 = 1 stack magnets
 2 = 2 stack magnets²
 3 = 3 stack magnets²
 x = Special

I = Voltage Rating

A = 24 Volt DC
 B = 48 Volt DC
 C = 120 Volt DC
 1 = 115 Volt RMS²
 3 = 230 Volt RMS
 5 = 400 Volt RMS
 6 = 460 Volt RMS
 X = Special voltage rating – not to exceed 460 Vrms

J = Motor Poles

8 = 8 motor poles

KK = Motor Speed

24 = 2400 rpm, SLM142
 30 = 3000 rpm, SLM/G115
 40 = 4000 rpm, SLM/G090
 01-99 Special speed, consult Exlar

XX .. XX = Options

(please list desired options)

Special Options

NI = Non-incendive construction
 HW = Side handwheel manual drive including Class I Div 2 limit switch
 RD = Rear manual drive
 SD = Hex side drive

Housing Options

EN = Electroless nickel plating
 HC = Type III anodizing hard coat
 XH = Special housing option
 XL = Special lubrication
 XM = Special motor option

= Part No. Designator for Specials

Optional 5 digit assigned part number to designate unique model numbers for specials.

Notes:

1. These housing may indicate the need for special material main rods or mounting.
2. 115 Vrms is not available on a 2 or 3 stack SLM/G, or a 3 stack SLM/G090.