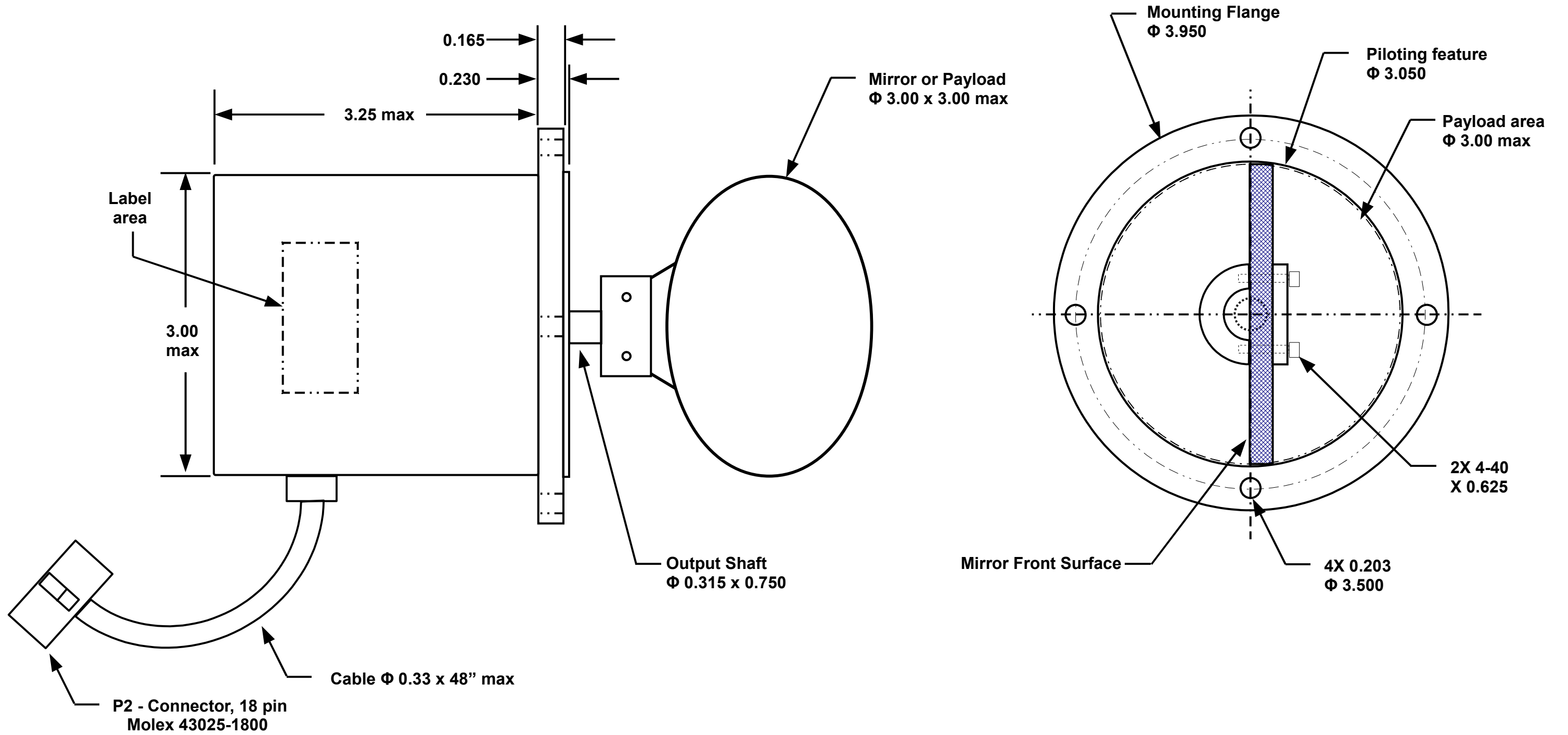


**Notes**

- 1. Larger mirrors may be accommodated.
- 2. Various mirror substrates & coatings are available.

LTR	Description	ECN No.	Date	Initial
A	Initial Release		11-28-2012	E.E.



Material	<b>Proprietary Information</b> Do not share with a third party without written approval from SignalTronix	Tolerances unless otherwise specified: X.XXX = ±0.005" X.XX = ±0.01" Angles = ± 0.5°	Date 11-28-2012		Part No. 3010-100	Rev. A
Finish		Projection	Approval E.E.		File Name File: 3010-100A	Part Name <b>Mirror Positioner/Scanner</b> Outline & Mounting

Notes

LTR	Description	ECN No.	Date	Initial
A	Initial Release		11-28-2012	E.E.

## SMP3010A Specification Table

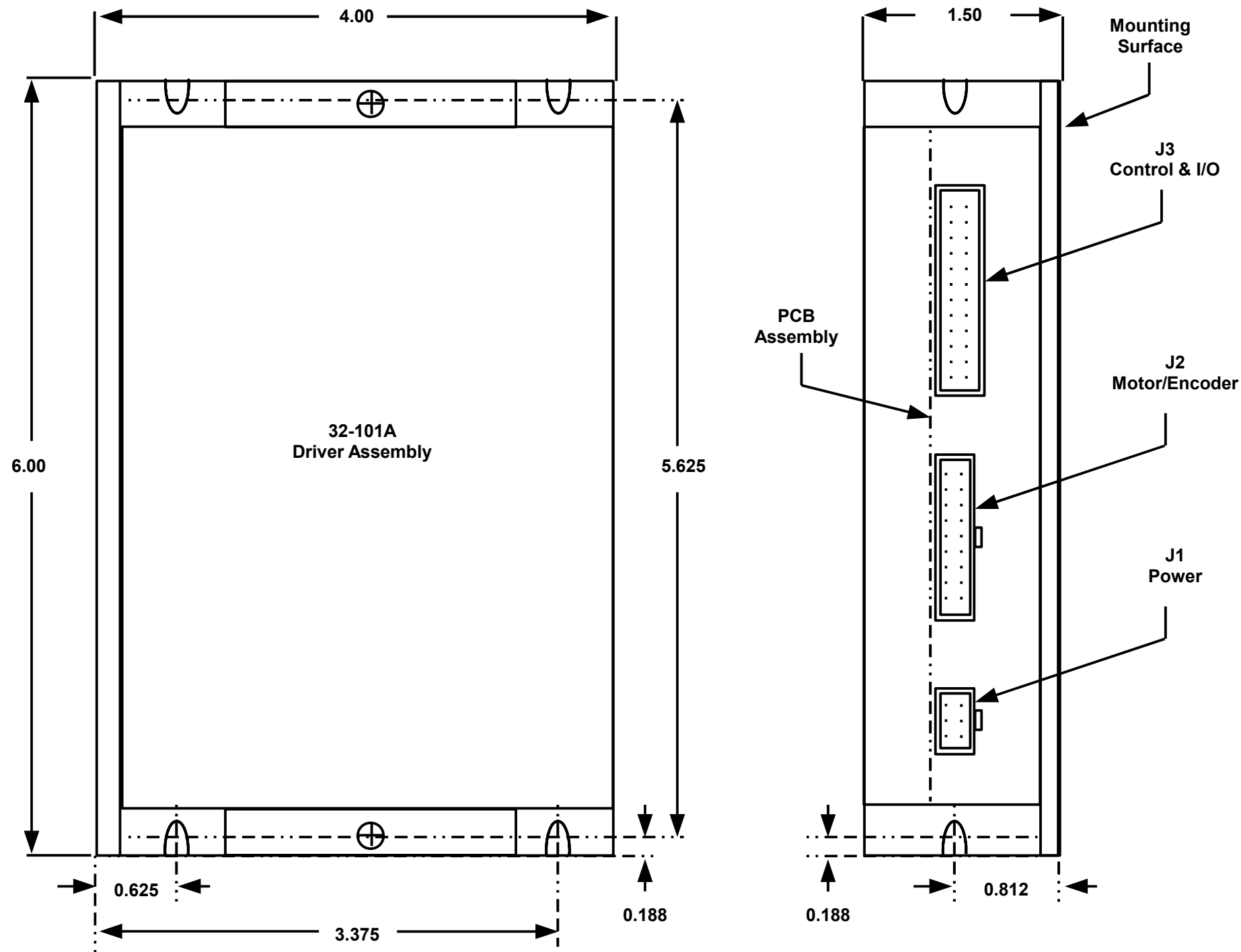
MODEL	3010-100A	3010-102A	3010-104A
Feedback Device	RVDT	RESOLVER	ENCODER
Angular Range	+/-30°	360°	360°
Resolution	16 Bit, 0.000916° / LSB	16 Bit, 0.00549° / LSB	0.001096° / LSB
Repeatability	+/-0.0015°	+/-0.0055°	+/-0.0015°
Accuracy (Basic)	+/-0.05°	+/-0.15°	+/-0.01°
Accuracy (Calibrated)	+/-0.005°	+/-0.025°	+/-0.002°
Response Time (45° Step)*	20ms	20ms	20ms
Control Bandwidth*	55Hz	55Hz	55Hz
Max Slew Rate	16000 Deg/sec	16000 Deg/sec	9600 Deg/sec
Motor Peak Torque	25 oz-in	25 oz-in	25 oz-in
Operating Temperature Range	-25°C to +70°C	-25°C to +70°C	0°C to +70°C
Storage Temperature Range	-40°C to +80°C	-40°C to +80°C	-20°C to +80°C
Power Requirement	20VDC to 36VDC, 4.5A	20VDC to 36VDC, 4.5A	20VDC to 36VDC, 4.5A
Duty Cycle	Continuous	Continuous	Continuous

\* With 2.75" x 1.75" x 0.230" Aluminum Mirror Payload

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Finish			Approval E.E.		File Name File: 3010-100A	Part Name <b>Mirror Positioner/Scanner Outline &amp; Mounting</b>

Notes

LTR	Description	ECN No.	Date	Initial
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Power Connector J1

Molex 43045-0601  
Mate: 43025-0608

- J1-1 +24VDC Power Input
- J1-2 +24VDC Power Input
- J1-3 Reserved
- J1-4 Chassis GND
- J1-5 Power Return
- J1-6 Power Return

Control I/O Connector J3

TE/AMP 5-87579-9  
Mate: 1-87977-0

- J3-01 Digital Return
- J3-02 Encoder Channel-A Out
- J3-03 Encoder Channel-B Out
- J3-04 Encoder Index Out
- J3-05 Digital Return
- J3-06 RS422 Data IN +
- J3-07 RS422 Data IN-
- J3-08 RS422 Data OUT+
- J3-09 RS422 Data OUT-
- J3-10 RS422 Clock+
- J3-11 RS422 Clock-
- J3-12 Analog Return
- J3-13 Position Command IN+
- J3-14 Position Command IN-
- J3-15 Position Out
- J3-16 Mode Select-1 IN
- J3-17 Mode Select-2 IN
- J3-18 Mode Select-3 IN
- J3-19 Digital Return
- J3-20 Enable Input
- J3-21 DP-1 IN
- J3-22 DP-2 IN
- J3-23 DP-3 IN
- J3-24 Fault OUT

Motor/Encoder Connector J2

Molex 43045-1801  
Mate: 43025-1800

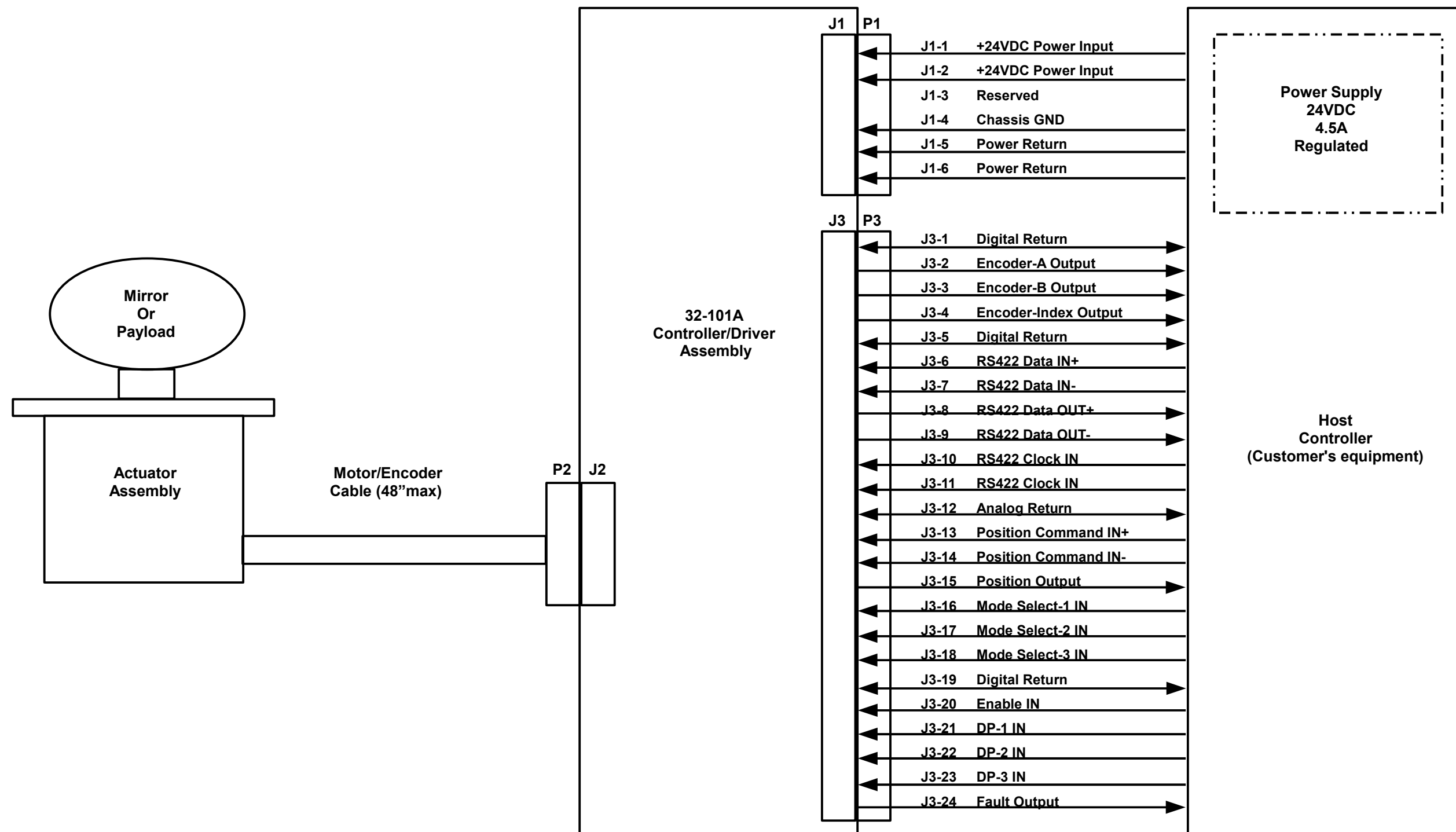
- J2-01 Motor Phase-A
- J2-02 Motor Phase-B
- J2-03 Motor Phase-C
- J2-04 Cable Shield
- J2-05 Sensor Power (+5v)
- J2-06 Hall sensor power GND
- J2-07 Hall sensor H1 output
- J2-08 Hall sensor H2 output
- J2-09 Hall sensor H3 output
- J2-10 Encoder Power (+5V)
- J2-11 RVDT/RESOLVER Excitation +
- J2-12 RVDT/RESOLVER Excitation -
- J2-13 RVDT/RESOLVER Signal-A
- J2-14 RVDT/RESOLVER Signal-B
- J2-15 Encoder-A, RVDT/RESOLVER-C
- J2-16 Encoder-B, RVDT/RESOLVER-D
- J2-17 Encoder Index
- J2-18 Encoder GND

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Finish		Projection	Approval E.E.		File Name File: 3010-100A	Part Name <b>Mirror Positioner/Scanner Outline &amp; Mounting</b>

Notes

1. Typical connection configuration

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Finish		Projection	Approval E.E.		File Name File: 3010-100A	Part Name <b>Mirror Positioner/Scanner</b> Outline & Mounting